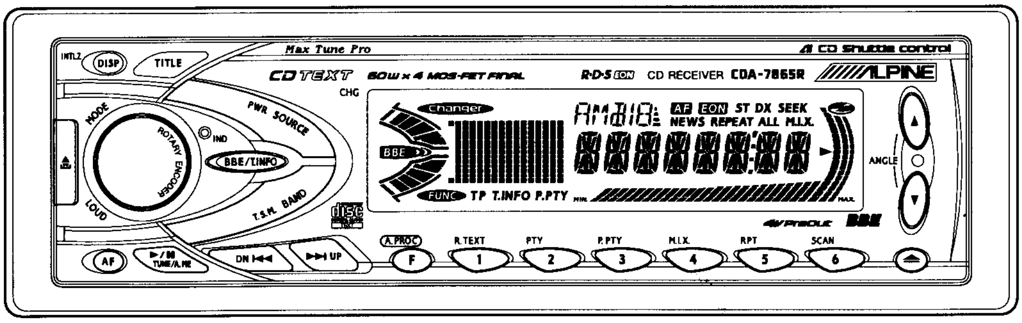
ALPINE

SERVICE MANUAL

FM/MW/LW/RDS CD Receiver

COMPACT DISC DIGITAL AUDIO TEXT



INTL2
DISP
TITLE
Max Tune Pro
CD TEXT
60W x 4 MOS-FET FINAL
R·D·S EON
CD RECEIVER CDA-7865R
ALPINE
CD Shuttle control
CHG
PWR SOURCE
MODE
ROTARY ENCODER
IND
BBE/T.INFO
LOUD
T.S.M. BAND
Changer
BBE
FUNC
AF EON ST DX SEEK
NEWS REPEAT ALL M.I.X.
TP T.INFO P.PTY
ANGLE
BBE
AF
▶/II TUNE/A.ME
DN ◀◀
▶▶ UP
A.PROC
F
R.TEXT
1
PTY
2
P.PTY
3
M.I.X.
4
RPT
5
SCAN
6

CDA-7865R

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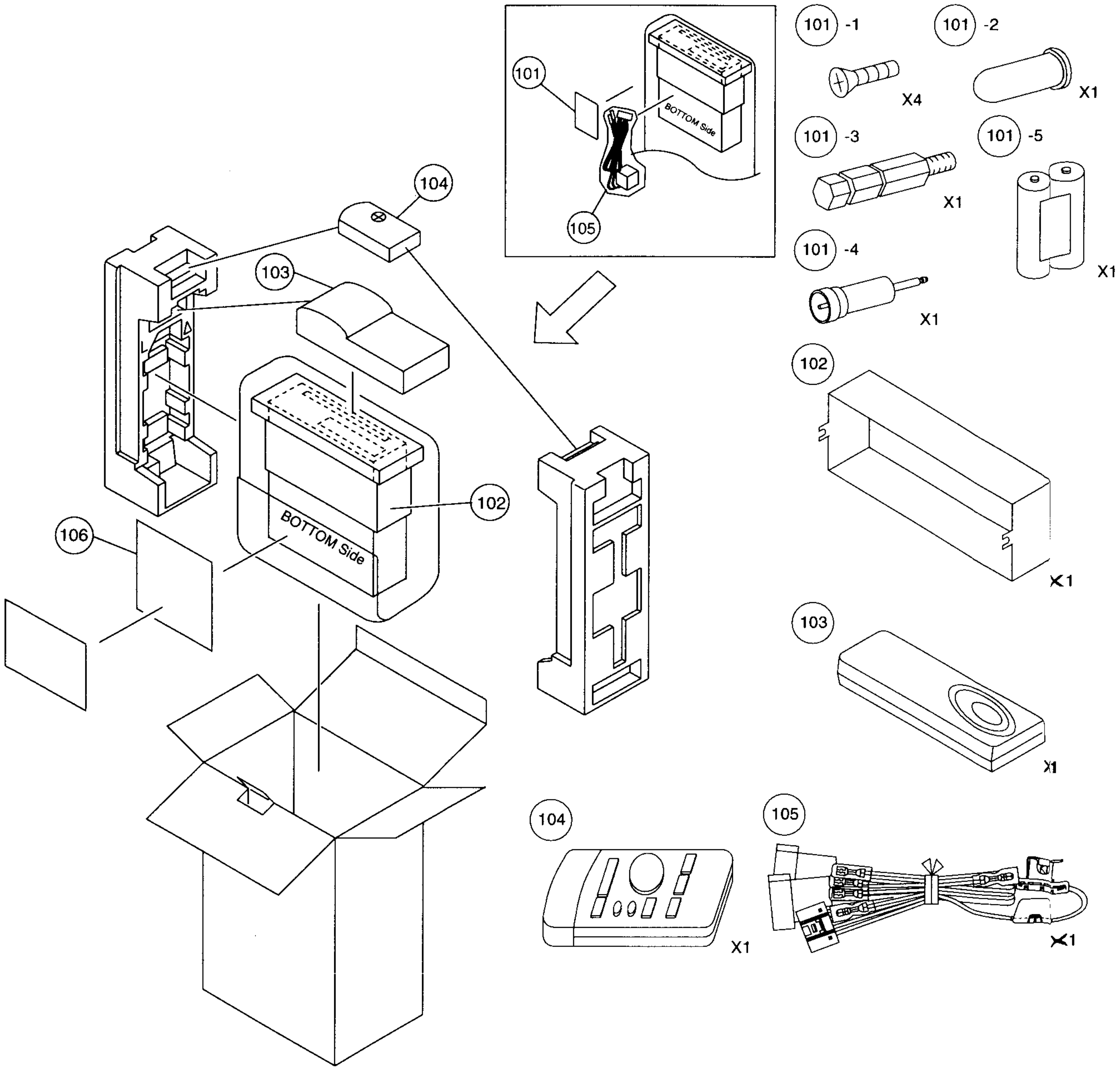
NOTE : Due to continuing product improvement, specifications and designs are subject to change without notice.

Packing Assembly Parts List

Symbol No.	Part No.	Description
101-1	03S72235F13	SCR, MCH M5X8 FLAT
101-2	36A11113W01	CAP, RUBBER (A)
101-3	03A11112W01	BOLT, HEX. M5 (A)
101-4	01T15394Y02	ANT, JASO-ISO
101-5	60T55630W01	BAT, MGN R03 (NB) UM-4

Symbol No.	Part No.	Description
102	15D50406W01	CASE, INNER
103	15D10867Y01	CARRING, CASE
104	01T00716K02	ASSY, REMOCON
105	01T35536Y01	ASSY, WIRE ISO 65RO
106	68P01149K85	O/M AOEU AODN

Packing Method View


101
105
BOTTOM Side
104
103
102
106
BOTTOM Side
101 -1
X4
101 -2
X1
101 -3
X1
101 -5
X1
101 -4
X1
102
X1
103
X1
104
X1
105
X1

Specifications

<CD SECTION>

System	Optical (Compact Disc System)
Quantizing Bit Number	16bit Linear system
Channels	2 Channels
Channel Balance (1kHz)	0±3dB
Distortion (1kHz)	0.1%
Frequency Response (Ref. 1kHz)	17Hz : 0±3dB 127Hz : 0±2dB 10.007kHz : 0±2dB 19.997kHz : 0±4dB
S/N Ratio	95dB
Separation (1kHz)	55dB
De-Emphasis (Ref. 1kHz)	4kHz : -20±3dB 16kHz : -20±3dB

<FM RADIO>

Intermediate Frequency	10.7±0.1MHz
Frequency Range	87.5~108MHz
Usable Sensitivity (Mono, 30dB S/N, at 98.1MHz)	17.2dBf
-3dB Limiting Sensitivity (at 98.1MHz)	21.2dBf
Residual Noise (Ref. 400Hz, narrow, at 98.1MHz)	25±10dB
S/N Ratio (Stereo, at 98.1MHz)	55dB
Image Rejection (at 106.1MHz)	40dB
IF Rejection (at 90.1MHz)	60dB
Distortion (Input 60dBµ, at 98.1MHz)	1%
Frequency Response (Ref. 400Hz, at 98.1MHz)	100Hz : 0±3dB 10kHz : -12±3dB
Stereo Separation (1kHz, at 98.1MHz)	20dB
PS Sensitivity (at 98.1MHz)	36.2dBf

<MW RADIO>

Intermediate Frequency	1st. : 10.7MHz 2nd. : 450kHz
Frequency Range	531~1,602kHz
Usable Sensitivity (20dB S/N, at 999kHz)	34dB
S/N Ratio (at 999kHz)	44dB
Image Rejection (at 1,404kHz)	50dB
IF Rejection (at 603kHz)	60dB
Distortion (at 999kHz)	1.5%
Frequency Response (Ref. 400Hz, at 999kHz)	100Hz : -3±4dB 4kHz : -11+6, -12dB

<LW RADIO>

Intermediate Frequency	1st. : 10.7MHz 2nd. : 450kHz
Frequency Range	153~281kHz
Usable Sensitivity (20dB S/N, at 216kHz)	42dB
S/N Ratio (at 216kHz)	44dB
Image Rejection (at 270kHz)	50dB
IF Rejection (at 162kHz)	60dB
Distortion (at 216kHz)	1.5%
Frequency Response (Ref. 400Hz, at 216kHz)	100Hz : -3±4dB 4kHz : -11+6, -12dB

<GENERAL>

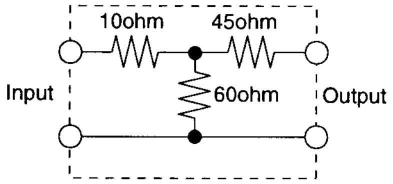
Power Supply	DC14.4V
Power Output (T.H.D. 10%, TCD-782 (0dB, 1kHz)) /Impedance	25W/ch/4ohm
Pre Output (T.H.D. 1%, TCD-782 (0dB, 1kHz)) /Impedance	5V±2.5dBV/10Kohm
Dimensions (W×H×D)	Chassis : 178×50×158mm Nose : 188×58×26.8mm
Weight	1.5kg

NOTE : Due to Continuing product improvement, specifications and designs are subject to change without notice.

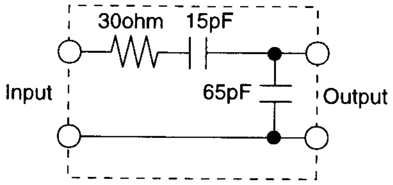
Adjustment Procedures

1. FM/AM SECTION

(1) Dummy Antenna Circuit


10ohm
45ohm
60ohm
Input
Output

For 50 ohm FM Signal Generator   Figure 1


30ohm
15pF
65pF
Input
Output

For 50 ohm AM Signal Generator   Figure 2

(2) Connections

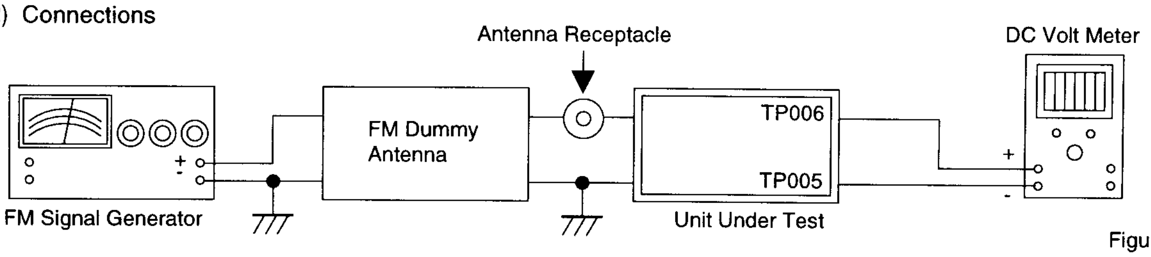

Antenna Receptacle
DC Volt Meter
FM Dummy Antenna
TP006
TP005
+
-
FM Signal Generator
Unit Under Test

Figure 3

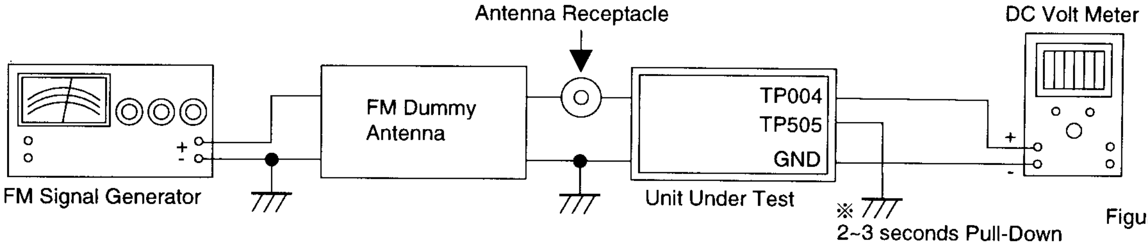

Antenna Receptacle
DC Volt Meter
FM Dummy Antenna
TP004
TP505
GND
+
-
FM Signal Generator
Unit Under Test
※
2~3 seconds Pull-Down

Figure 4

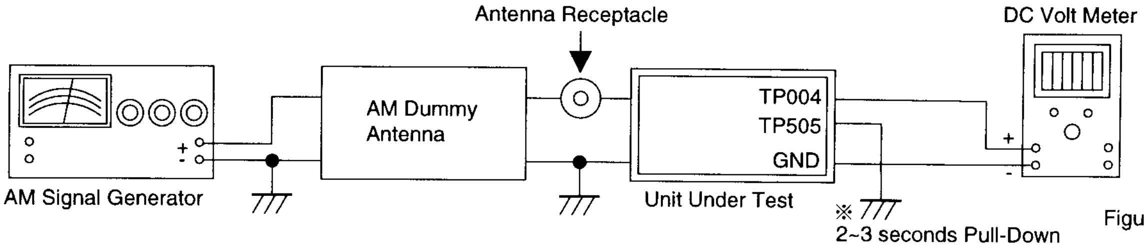

Antenna Receptacle
DC Volt Meter
AM Dummy Antenna
TP004
TP505
GND
+
-
AM Signal Generator
Unit Under Test
※
2~3 seconds Pull-Down

Figure 5

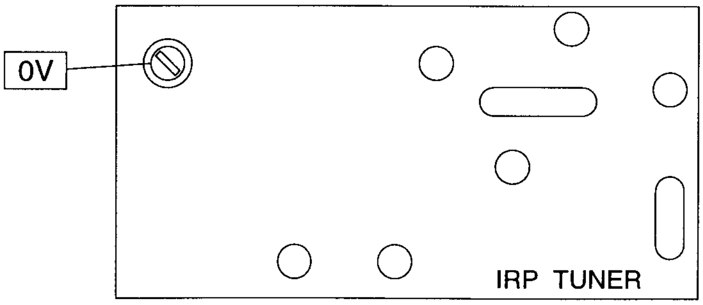
(3) Control Settings

Power Switch	ON	Band Switch	FM/AM (MW)
Fader Control	Center Position	BBE Switch	OFF
Balance Control	Center Position	LOUD Switch	OFF
Treble Control	Center Position	Others	OFF
Bass Control	Center Position		

(4) Adjustment Procedures

Step	Description	Connection	Signal Generator		Dial Control	Test Point / P.W.Board Coordinates	Adjustment
1	IF Adjustment	Figure 3	98.1MHz, 72dBμ (Mod. 400Hz, Dev. 40kHz)		98.1MHz	TP005 (1-B) TP006 (1-B)	Adjust $\boxed{\text{0V}}$ to 0±30mV.
2	Signal Meter Adjustment	Figure 4	98.1MHz, 51dBμ (Mod. 400Hz, Dev. 40kHz → Mod. OFF)		98.1MHz	TP004 (1-B) TP505 (1-C)	Auto Adjustment : After setting up of Signal Genarator, short GND and TP505 (Pull-Down) for 2~3 seconds. (SPEC) TP004 : 3±0.1V
3	AM Signal Meter Adjustment	Figure 5	(1)	999kHz, 30dBμ (Mod. 400Hz, 30% → Mod. OFF)	999kHz	TP004 (1-B) TP505 (1-C)	Auto Adjustment : After setting up of Signal Genarator, short GND and TP505 (Pull-Down) for 2~3 seconds.
			(2)	999kHz, 32dBμ (Mod. 400Hz, 30% → Mod. OFF)	999kHz	TP004 (1-B) TP505 (1-C)	Proceed same Auto Adjustment of step (1) under step (2). (SPEC) TP004 : 1.8±0.1V → OK (SPEC) TP004 : others 1.8±0.1V → NG NOTE : NG : Proceed same Auto Adjustment of step (1) under step (3).
			(3)	999kHz, 27~29dBμ (Mod. 400Hz, 30% → Mod. OFF)	999kHz	TP004 (1-B) TP505 (1-C)	Proceed same Auto Adjustment of step (1) under step (3).
			(4)	999kHz, 32dBμ (Mod. 400Hz, 30% → Mod. OFF)	999kHz	TP004 (1-B) TP505 (1-C)	Proceed same Auto Adjustment of step (1) under step (4).

Adjustment Locations

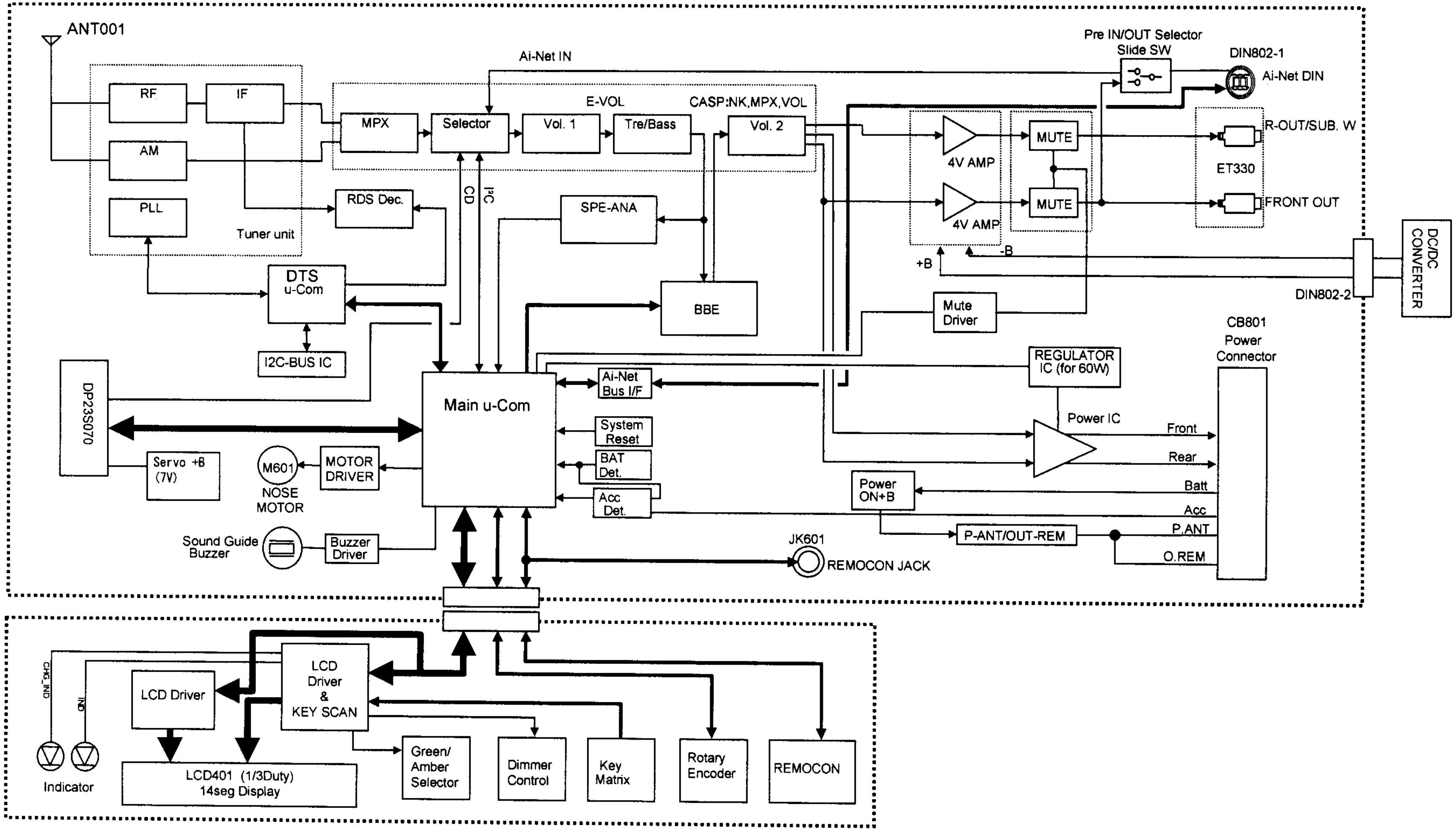


FM/MW/LW Tuner Unit, MB4R9030 (TU001)

NOTE : For the Test Points, refer to the Parts Layout on P.W.Boards and Wiring Diagram.

CDA-7865R

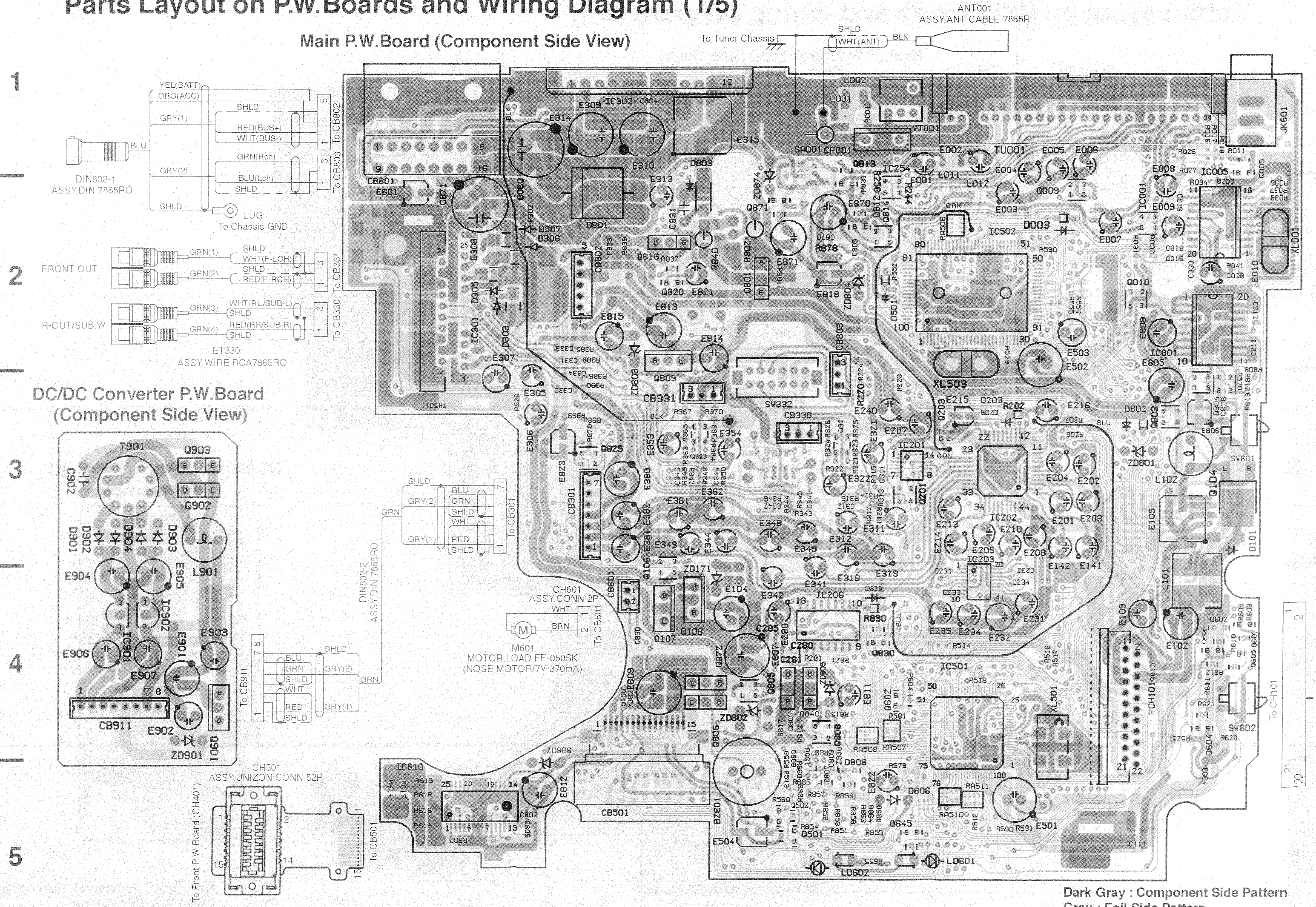
Block Diagram


ANT001
RF
IF
AM
PLL
Tuner unit
RDS Dec.
DTS u-Com
I2C-BUS IC
Ai-Net IN
MPX
Selector
E-VOL
Vol. 1
Tre/Bass
CASP:NK,MPX,VOL
Vol. 2
CD
I²C
SPE-ANA
BBE
4V AMP
4V AMP
MUTE
MUTE
+B
-B
Mute Driver
Pre IN/OUT Selector
Slide SW
DIN802-1
Ai-Net DIN
R-OUT/SUB. W
ET330
FRONT OUT
DC/DC CONVERTER
DIN802-2
CB801
Power Connector
REGULATOR IC (for 60W)
Power IC
Front
Rear
Batt
Acc
P.ANT
O.REM
Power ON+B
P-ANT/OUT-REM
JK601
REMOCON JACK
Main u-Com
Ai-Net Bus I/F
System Reset
BAT Det.
Acc Det.
DP23S070
Servo +B (7V)
M601
NOSE MOTOR
MOTOR DRIVER
Sound Guide Buzzer
Buzzer Driver
CHG_IND
IND
Indicator
LCD Driver
LCD Driver & KEY SCAN
LCD401 (1/3Duty) 14seg Display
Green/ Amber Selector
Dimmer Control
Key Matrix
Rotary Encoder
REMOCON

Parts Layout on P.W.Boards and Wiring Diagram (1/5)

Main P.W.Board (Component Side View)

DC/DC Converter P.W.Board (Component Side View)

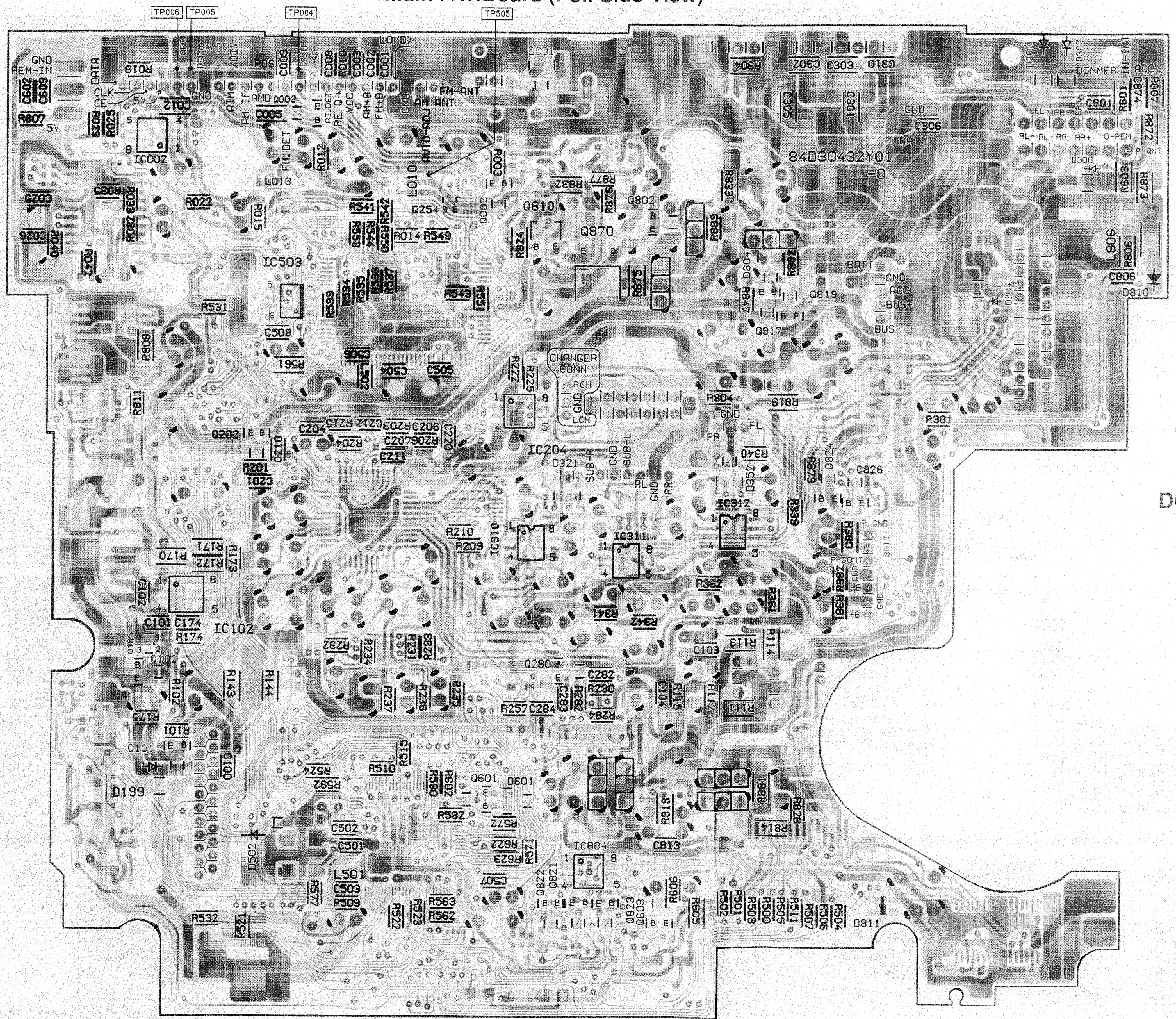

1
2
3
4
5
ANT001
ASSY,ANT CABLE 7865R
To Tuner Chassis
SHLD
WHT(ANT)
BLK
YEL(BATT)
ORG(ACC)
GRY(1)
SHLD
RED(BUS+)
WHT(BUS-)
BLU
GRN(Rch)
GRY(2)
BLU(Lch)
SHLD
DIN802-1
ASSY,DIN 7865RO
SHLD
LUG
To Chassis GND
To CB802
To CB803
FRONT OUT
GRN(1)
SHLD
WHT(F-LCH)
GRN(2)
SHLD
RED(F-RCH)
To CB331
R-OUT/SUB.W
GRN(3)
WHT(RL/SUB-L)
SHLD
GRN(4)
RED(RR/SUB-R)
SHLD
To CB330
ET330
ASSY,WIRE RCA7865RO
CB801
E601
C871
E314
E309
IC302
E315
E310
D803
D801
D307
D306
E308
IC301
D305
D303
E307
E305
E306
CB802
Q816
Q820
E821
E815
E813
E814
Q809
CB331
ZD803
ZD874
Q871
E870
R878
E871
E818
ZD804
Q801
L002
L001
R001
VT001
SA001
CF001
Q813
IC254
E001
L011
L012
TU001
E002
E004
E005
E006
Q009
E003
IC502
D003
D501
XL503
CB803
SW332
CB330
R220
E240
E215
D203
E216
Q203
IC201
Q201
E207
E204
E202
IC202
E210
E209
E208
IC203
E213
E214
E201
E203
E142
E141
E231
E232
E234
E235
R830
Q830
C280
C281
C285
E280
ZD805
E811
Q602
IC501
XL501
CH101
R525
Q604
SW602
E501
RA511
RA510
D806
Q645
Q501
Q502
E504
BZ601
ZD802
Q806
E812
C802
CB501
IC810
ZD806
LD602
LD601
IC001
IC005
E008
E009
E007
JK601
XL001
E010
Q010
IC801
E805
E806
D802
E809
SW601
ZD801
L102
Q104
E105
D101
L101
E103
E102
Q602
E503
E502
E104
ZD171
E341
E342
E318
E319
IC206
Q106
Q107
Q108
CB601
E348
E349
E343
E344
E361
E362
E312
E311
E381
E382
E380
E353
E354
CB301
Q825
E823
To CH101
To DP-S Main P.W.Board (CB801)
SHLD
BLU
GRY(2)
GRN
SHLD
WHT
GRY(1)
RED
SHLD
GRN
To CB301
DIN802-2
ASSY,DIN 7865RO
CH601
ASSY,CONN 2P
WHT
BRN
To CB601
M601
MOTOR,LOAD FF-050SK
(NOSE MOTOR/7V-370mA)
SHLD
BLU
GRN
SHLD
WHT
RED
SHLD
GRY(2)
GRN
GRY(1)
To CB911
T901
Q903
Q902
C902
D901
D902
D904
D903
E904
E905
L901
IC902
IC901
E901
E903
E906
E907
CB911
E902
Q901
ZD901
CH501
ASSY,UNIZON CONN 52R
To Front P.W.Board (CH401)
To CB501
A
B
C
D
E
F
G

Dark Gray : Component Side Pattern
Gray : Foil Side Pattern

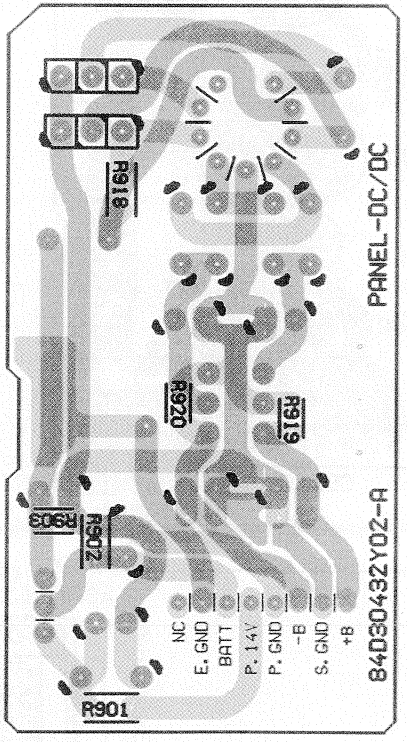
CDA-7865R

Parts Layout on P.W.Boards and Wiring Diagram (2/5)

Main P.W.Board (Foil Side View)


TP006
TP005
TP004
TP505
GND
REM-IN
DATA
CLK
CE
5V
R019
IC002
R022
IC503
R531
R809
R811
IC102
IC204
IC310
IC311
IC312
IC804
Q254
Q810
Q870
Q802
Q819
Q817
Q826
Q280
Q601
Q202
Q101
D199
D502
D601
D811
D810
FM-ANT
AM ANT
AUTO-ADJ
L010
L013
L806
L501
FM-DET
84D30432Y01
-0
CHANGER
CONN
RCH
GND
LCH
SUB-R
SUB-L
RL
RR
FL
FR
BATT
ACC
BUS+
BUS-
DIMMER
IN-INT
P-ANT
P.GND
P-CONT
C305
C301
C302
C303
C310
C306
C601
C806
C508
C504
C505
C204
C206
C210
C211
C101
C174
C103
C104
C282
C284
C502
C501
C503
C507
C813
R304
R301
R804
R818
R340
R339
R361
R362
R341
R342
R114
R113
R112
R111
R115
R143
R144
R170
R171
R172
R173
R174
R101
R102
R201
R210
R209
R231
R232
R233
R234
R236
R237
R257
R280
R282
R284
R510
R515
R524
R592
R580
R582
R572
R571
R622
R623
R577
R509
R522
R523
R563
R562
R532
R521
R606
R605
R541
R543
R549
R561
R014
R015
R012
R824
R875
R847
R882
R889
R833
R832
R877
R876
R819
R881
R828
R814
R872
R873
R807
R806
R603
R601

DC/DC Converter P.W.Board (Foil Side Vie)

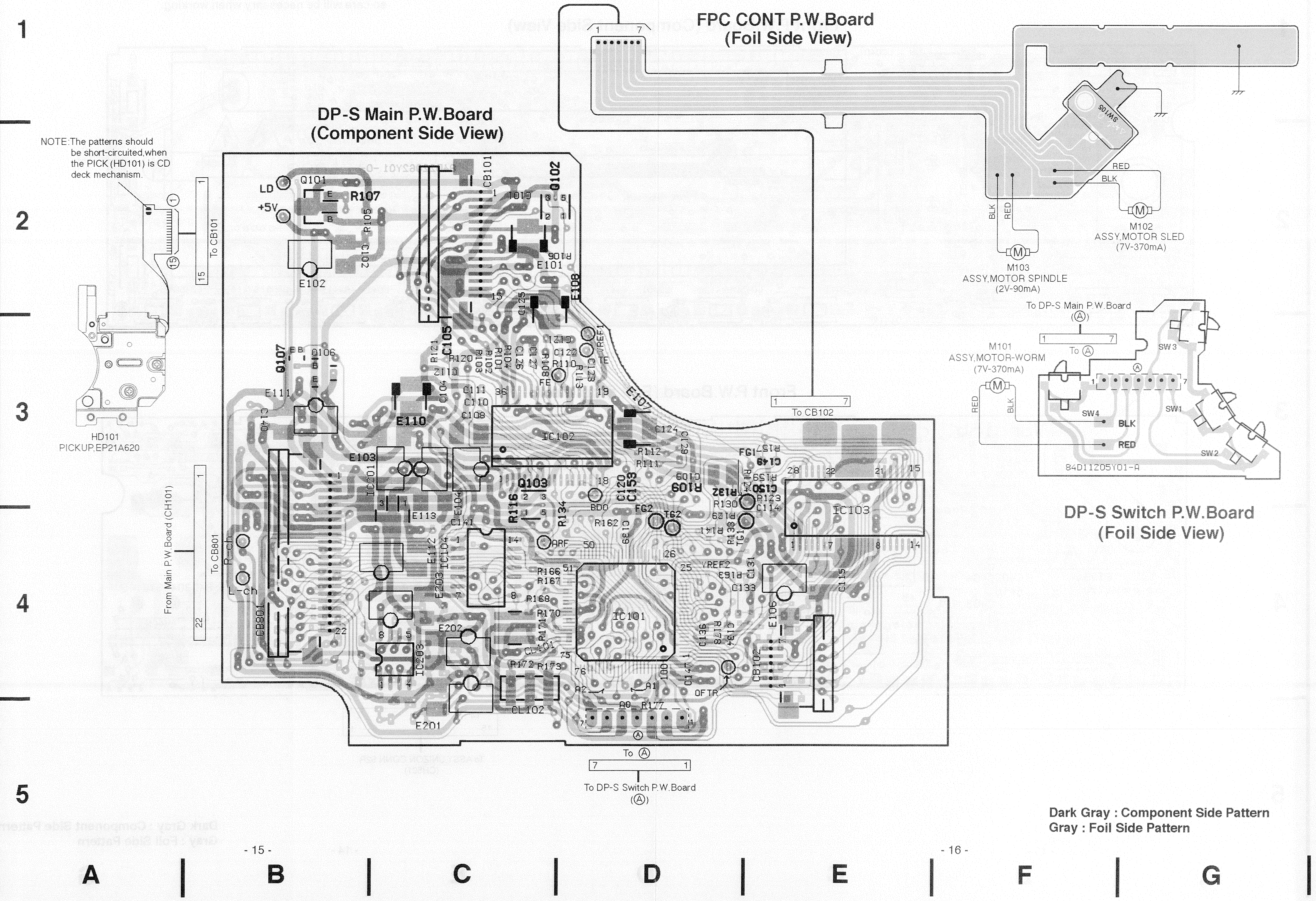

R918
R920
R919
R909
R902
R901
PANEL-DC/DC
84D30432Y02-A
NC
E.GND
BATT
P.14V
P.GND
-B
S.GND
+B

Dark Gray : Component Side Pattern
Gray : Foil Side Pattern

1
2
3
4
5

A | B | C | D | E | F | G

Parts Layout on P.W.Boards and Wiring Diagram (4/5)



1
2
3
4
5
A
B
C
D
E
F
G
①
⑮
To CB101
1
15
To CB102
To CB801
From Main P.W.Board (CH101)
R-ch
L-ch
CB801
LD
+5V
Q101
R107
R105
C103
E102
CB101
Q102
C101
R106
E101
E108
C125
C105
R121
R120
C112
C104
Q107
Q106
E111
C140
E110
E103
IC201
E113
E104
C141
E112
IC104
E203
IC203
E202
E201
C111
C110
C108
IC102
R104
R101
R102
R103
C126
C127
R108
R110
C122
C121
C123
R113
FE
TE
VREF1
E107
C124
C129
R112
R111
Q103
R116
R134
R109
C109
C120
C153
BDO
FG2
FG1
TG2
R162
C139
R157
C149
R159
C150
R132
R130
R129
R123
C114
R141
R138
TG1
IC103
ARF
IC101
R166
R167
R168
R170
R171
CL101
R172
R173
CL102
A0
A1
A2
R177
R178
YREF2
R163
C133
C131
C136
C134
C147
OFTR
CB102
C115
E106
To Ⓐ
To DP-S Switch P.W.Board
Ⓐ
1
7
RED
BLK
SW105
M102
ASSY,MOTOR SLED
(7V-370mA)
M103
ASSY,MOTOR SPINDLE
(2V-90mA)
To DP-S Main P.W.Board
M101
ASSY,MOTOR-WORM
(7V-370mA)
SW1
SW2
SW3
SW4
84D11Z05Y01-A

FPC CONT P.W.Board
(Foil Side View)

DP-S Main P.W.Board
(Component Side View)

NOTE:The patterns should be short-circuited,when the PICK (HD101) is CD deck mechanism.

HD101
PICKUP,EP21A620

DP-S Switch P.W.Board
(Foil Side View)

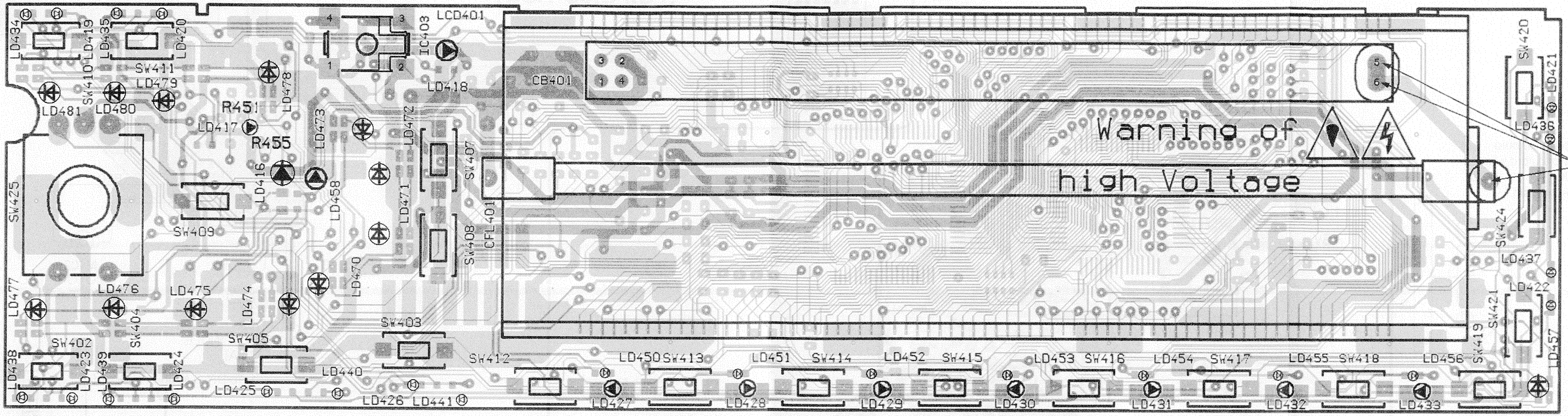
Dark Gray : Component Side Pattern
Gray : Foil Side Pattern

Parts Layout on P.W.Boards and Wiring Diagram (3/5)

Caution : The part marked with ⚠ is generating a high voltage, so care will be necessary when working.

1

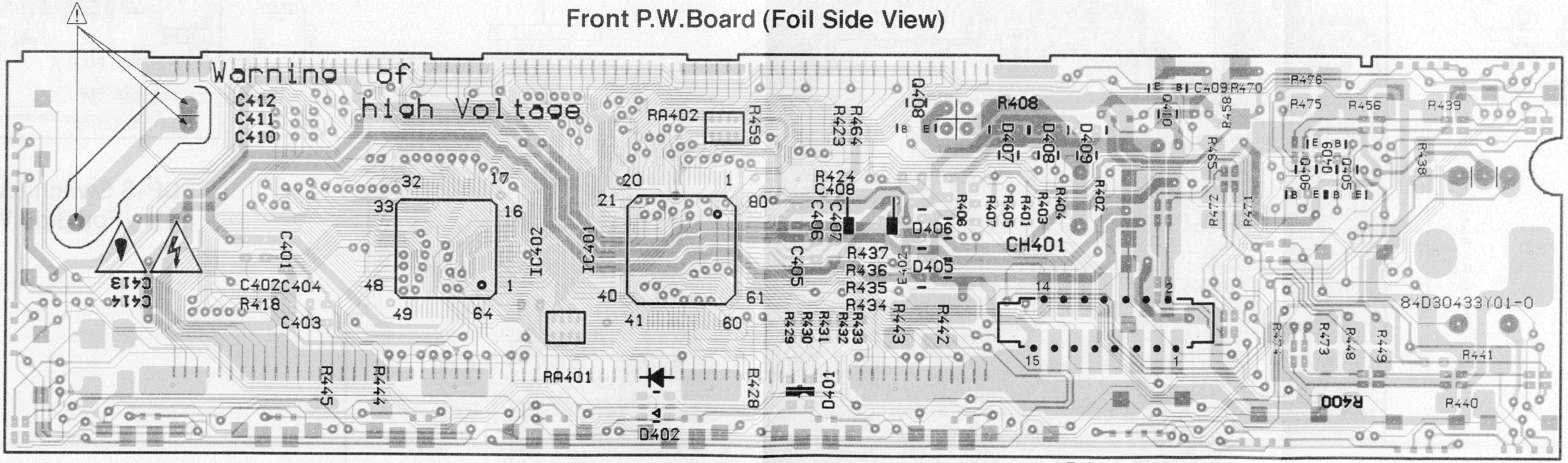
Front P.W.Board (Component Side View)


LD434
LD419
LD435
LD420
SW410
SW411
LD479
LD481
LD480
R451
LD417
R455
LD478
LD473
LD472
LCD401
IC403
LD418
CB401
LD416
LD458
LD471
SW407
SW408
CFL401
SW425
SW409
LD470
LD477
LD476
LD475
LD474
SW404
SW402
SW405
SW403
LD438
LD423
LD439
LD424
LD425
LD440
LD426
LD441
SW412
LD450
SW413
LD451
SW414
LD452
SW415
LD453
SW416
LD454
SW417
LD455
SW418
LD456
LD427
LD428
LD429
LD430
LD431
LD432
LD433
Warning of high Voltage
SW420
LD421
LD436
SW424
LD437
LD422
SW421
SW419
LD457
1
2
3
4
5
6

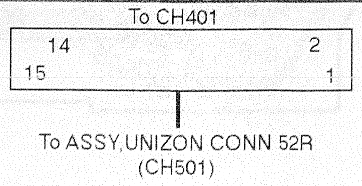
2

3

Front P.W.Board (Foil Side View)


Warning of high Voltage
C412
C411
C410
C413
C414
C401
C402
C404
C403
R418
IC402
IC401
RA402
RA401
R459
R464
R423
Q408
R408
D407
D408
D409
R424
C408
C407
C406
C405
D406
D405
R437
R436
R435
R434
R433
R432
R431
R430
R429
R443
R442
R406
R405
R407
R401
R403
R404
R402
CH401
R445
R444
R428
D401
D402
C409
R470
R476
R475
R456
R439
Q410
R458
R465
R472
R471
Q409
Q406
Q405
R438
R473
R448
R449
R474
R441
R440
R400
84D30433Y01-0
32
17
33
16
48
1
49
64
20
1
21
80
40
41
61
60
14
2
15
1

4


To CH401
14
2
15
1
To ASSY,UNIZON CONN 52R
(CH501)

5

Dark Gray : Component Side Pattern
Gray : Foil Side Pattern

A | B | C | D | E | F | G

Parts Layout on P.W.Boards and Wiring Diagram (5/5)

1

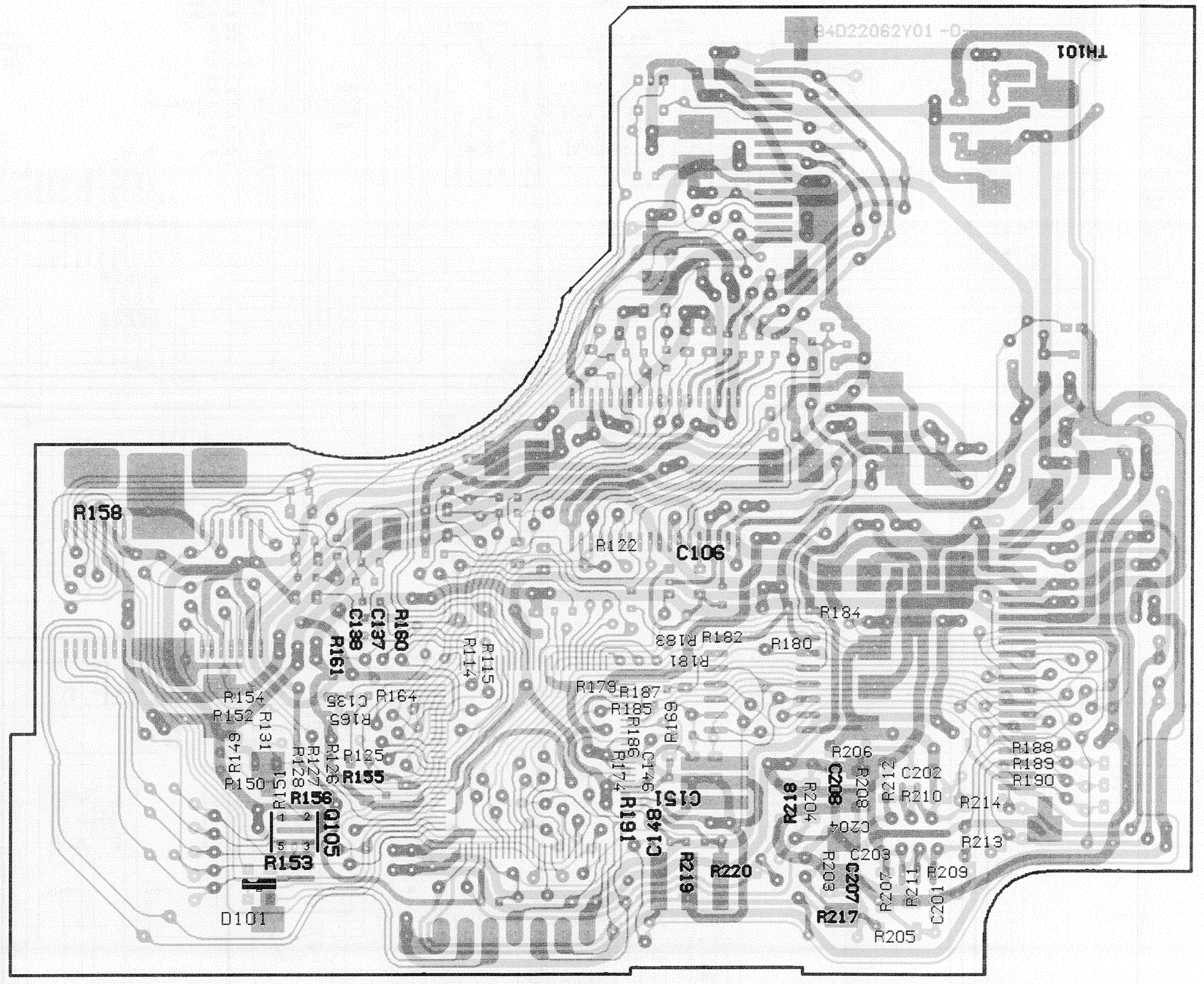
2

3

4

5

DP-S Main P.W.Board (Foil Side View)

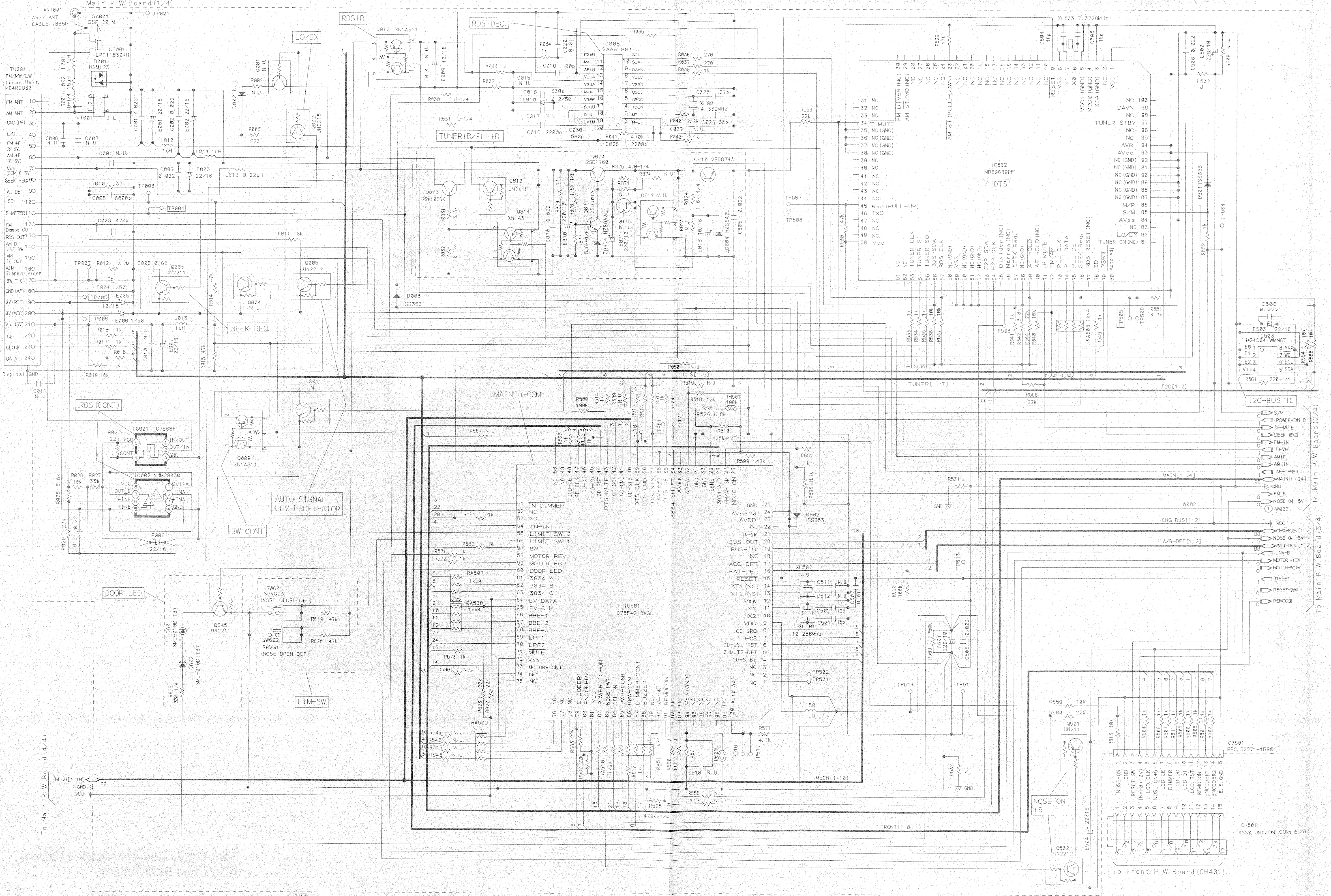

94D22062Y01 -0-
TH101
R158
R122
C106
R184
R183
R182
R180
R181
C138
C137
R160
R161
R114
R115
R154
R152
R131
R149
R150
R151
C135
R165
R164
R125
R128
R127
R126
R155
R156
1
2
5
3
Q105
R153
D101
R179
R187
R185
R186
R174
C146
R169
C151
R191
C148
R219
R220
R218
R204
R206
C208
R208
R212
C202
R210
C204
R214
R213
C203
R203
C207
R207
R211
R209
C201
R217
R205
R188
R189
R190

Dark Gray : Component Side Pattern
Gray : Foil Side Pattern

A | B | C | D | E | F | G

CDA-7865R Schematic Diagram (1/6)

Main P.W. Board (1/4)



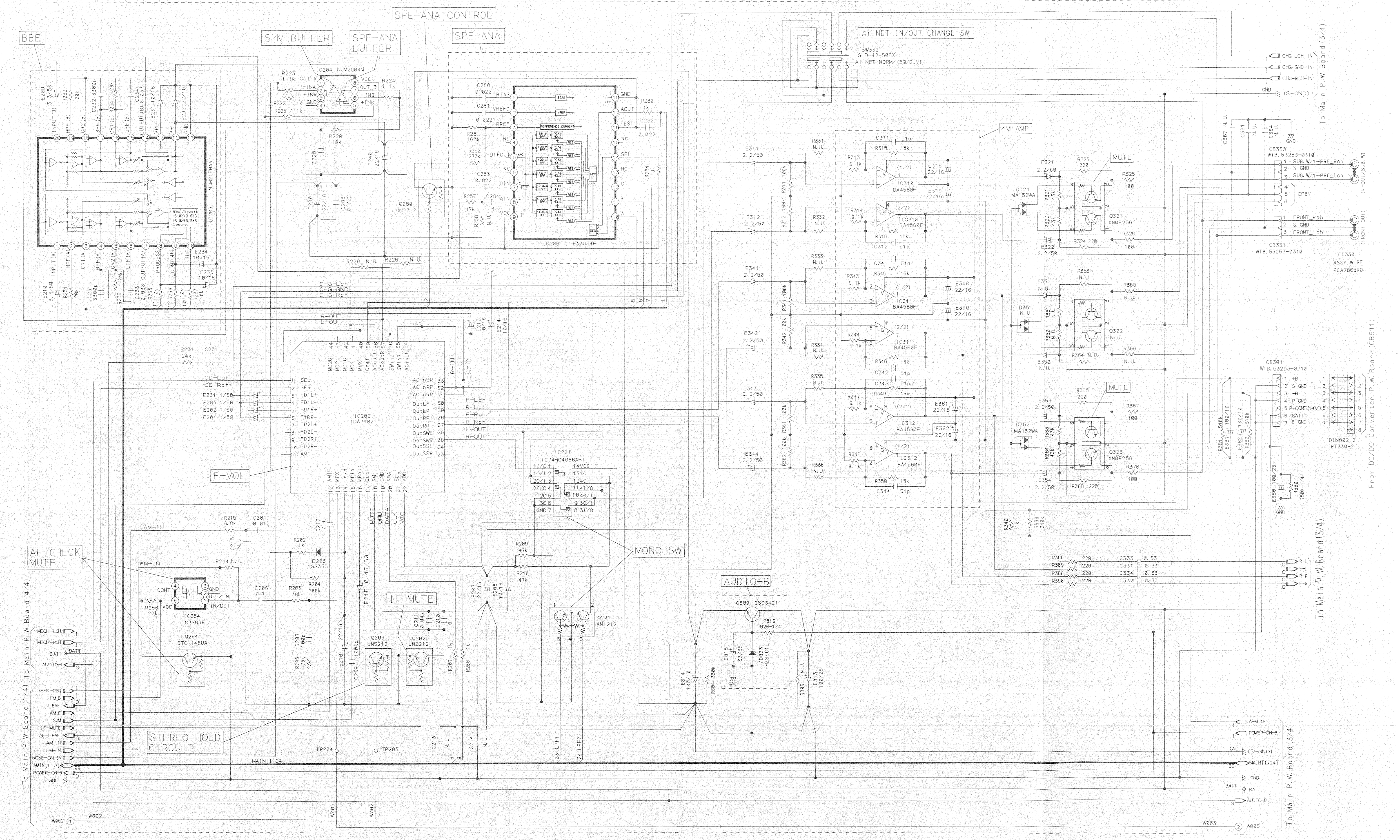
ANT001
ASSY.ANT
CABLE 7865R
SA001 DSP-201M
CF001 LPF11030KH
D001 HSM123
TU001
FM/MW/LW
Tuner Unit
MB4R9030
FM ANT 1
AM ANT 2
GND(RF) 3
L/D 4
FM +B (8.3V) 5
AM +B (8.3V) 6
Vcc (COM 8.3V) 7
SEEK REQ 8
AI DET 9
SD 10
S-METER 11
FM Demod.OUT 12
RDS OUT 13
AM D /IF BW 14
AM IF OUT 15
AIM Slope/Divider 16
BW T.C. 17
GND (AF) 18
0V (REF) 19
0V (AFC) 20
Vcc (5V) 21
CE 22
CLOCK 23
DATA 24
Digital GND
LO/DX
RDS+B
Q010 XN1A311
RDS DEC.
IC005 SAA6588T
XL001 4.332MHz
TUNER+B/PLL+B
Q013 2SA1036K
Q012 UN211H
Q014 XN1A311
Q070 2SD1760
Q071 2SD601A
Q075
Q011 N.U.
Q010 2SD874AL
ZD074 HZS6A3L
ZD004 HZS6A2L
SEEK REQ.
Q003 UN2211
Q004 N.U.
Q005 UN2212
D003 1SS353
RDS (CONT)
IC001 TC7S66F
IC002 NJM2903M
AUTO SIGNAL LEVEL DETECTOR
BW CONT
Q009 XN1A311
DOOR LED
LD601 SML-010DT87
LD602 SML-010DT87
Q645 UN2211
SW601 SPVG13 (NOSE CLOSE DET)
SW602 SPVG13 (NOSE OPEN DET)
LIM-SW
MAIN u-COM
IC501 D78F4218AGC
XL503 7.3728MHz
IC502 MB89680PF
DTS
TUNER[1:7]
I2C[1:2]
IC503 M24C04-WMN6T
I2C-BUS IC
XL502
XL501 12.288MHz
D502 1SS353
S/M
POWER-ON-B
IF-MUTE
SEEK-REQ
FM-IN
LEVEL
AMIF
AM-IN
AF-LEVEL
MAIN[1:24]
GND
FM_B
NOSE-ON-5V
W002
To Main P. W. Board (2/4)
VDD
CHG-BUS[1:2]
NOSE-ON-5V
A/B-DET[1:2]
INV-B
MOTOR-REV
MOTOR-FOR
RESET
RESET-SW
REMOCON
To Main P. W. Board (3/4)
MECH[1:10]
To Main P. W. Board (4/4)
FRONT[1:8]
Q501 UN211L
Q502 UN2212
NOSE ON +5
CB501 FFC.52271-1590
CN501 ASSY.UNIZON CONN #52R
To Front P. W. Board (CH401)

NOTE: N. U. is Not Used Parts.

Dark Gray : Component Side Pattern
Gray : Foil Side Pattern

Schematic Diagram (2/6)

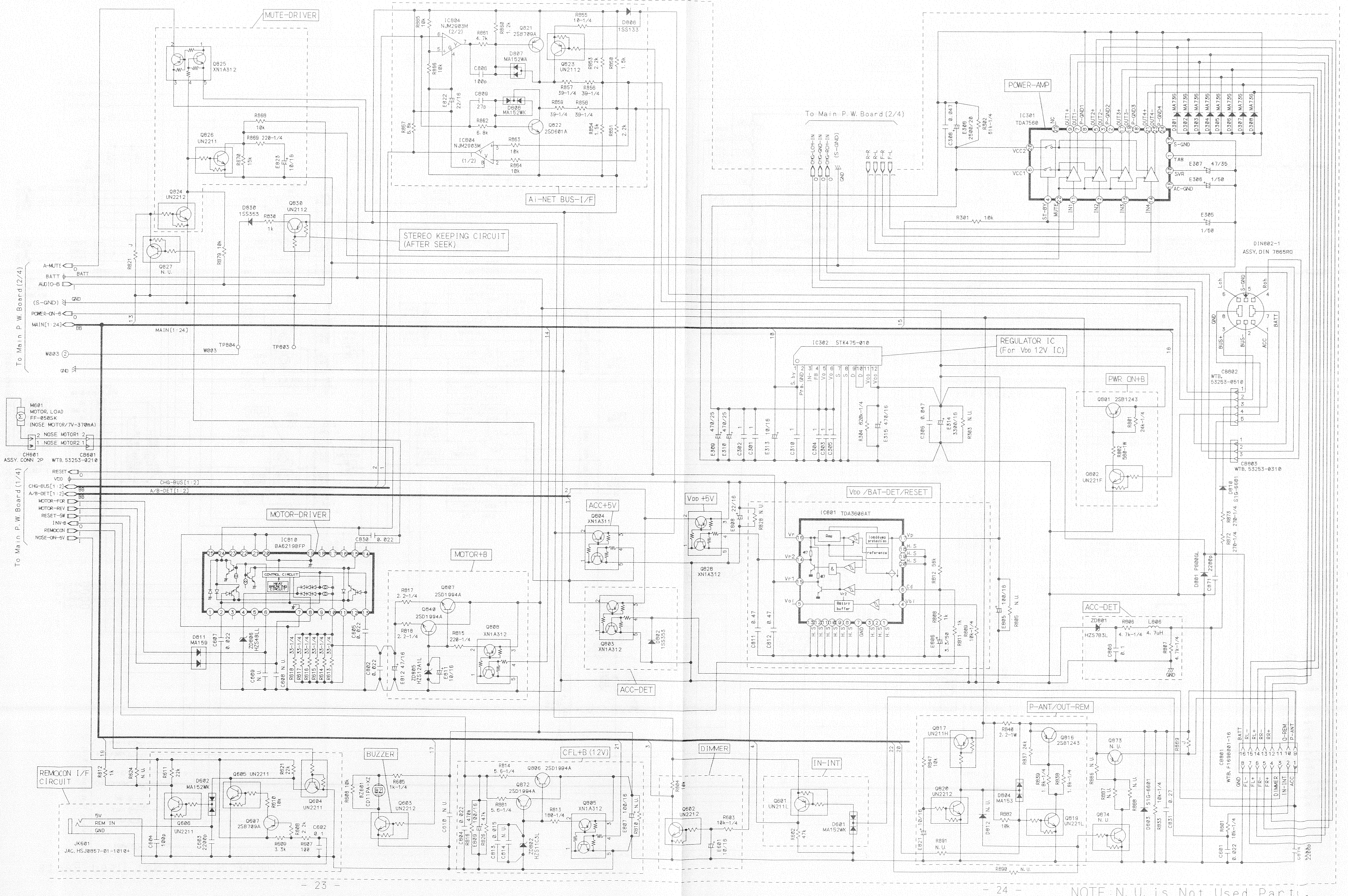
Main P.W. Board (2/4)


BBE
S/M BUFFER
SPE-ANA BUFFER
SPE-ANA CONTROL
SPE-ANA
Ai-NET IN/OUT CHANGE SW
SW332
SLD-42-508X
Ai-NET·NORM/(EQ/DIV)
IC204 NJM2904M
NJM2150AV
IC203
IC206 BA3834F
Q280 UN2212
4V AMP
IC310 BA4560F
IC311 BA4560F
IC312 BA4560F
MUTE
D321 MA152WA
Q321 XN0F256
D351 N.U.
Q322 N.U.
D352 MA152WA
Q323 XN0F256
CB330 WT8.53253-0310
1 SUB.W/1-PRE_Rch
2 S-GND
3 SUB.W/1-PRE_Lch
4
5 OPEN
6
(R-OUT/SUB.W)
CB331 WT8.53253-0310
1 FRONT_Rch
2 S-GND
3 FRONT_Lch
(FRONT OUT)
ET330 ASSY,WIRE RCA7865R0
CB301 WT8.53253-0710
1 +B
2 S-GND
3 -B
4 P.GND
5 P-CONT(14V)
6 BATT
7 E-GND
DIN802-2
ET330-2
From DC/DC Converter P.W. Board (CB911)
CHG-LCH-IN
CHG-GND-IN
CHG-RCH-IN
(S-GND)
To Main P.W. Board (3/4)
R-L
F-L
R-R
F-R
To Main P.W. Board (3/4)
IC202 TDA7402
E-VOL
IC201 TC74HC4066AFT
MONO SW
Q201 XN1212
AF CHECK MUTE
IC254 TC7S66F
Q254 DTC114EUA
IF MUTE
Q203 UN5212
Q202 UN2212
STEREO HOLD CIRCUIT
AUDIO+B
Q809 2SC3421
Z0803 HZS5C1L
TP204
TP203
MAIN[1:24]
MECH-LCH
MECH-RCH
BATT
AUDIO-B
SEEK-REQ
FM_B
LEVEL
AMIF
S/M
IF-MUTE
AF-LEVEL
AM-IN
FM-IN
NOSE-ON-5V
MAIN[1:24]
POWER-ON-B
GND
To Main P.W. Board (4/4)
To Main P.W. Board (1/4)
A-MUTE
POWER-ON-B
(S-GND)
MAIN[1:24]
GND
BATT
AUDIO-B
To Main P.W. Board (3/4)
W002
W003
CHG-Lch
CHG-GND
CHG-Rch
R-OUT
L-OUT
CD-Lch
CD-Rch
AM-IN
FM-IN
F-Lch
R-Lch
F-Rch
R-Rch
L-OUT
R-OUT

NOTE: N.U. is Not Used Parts.

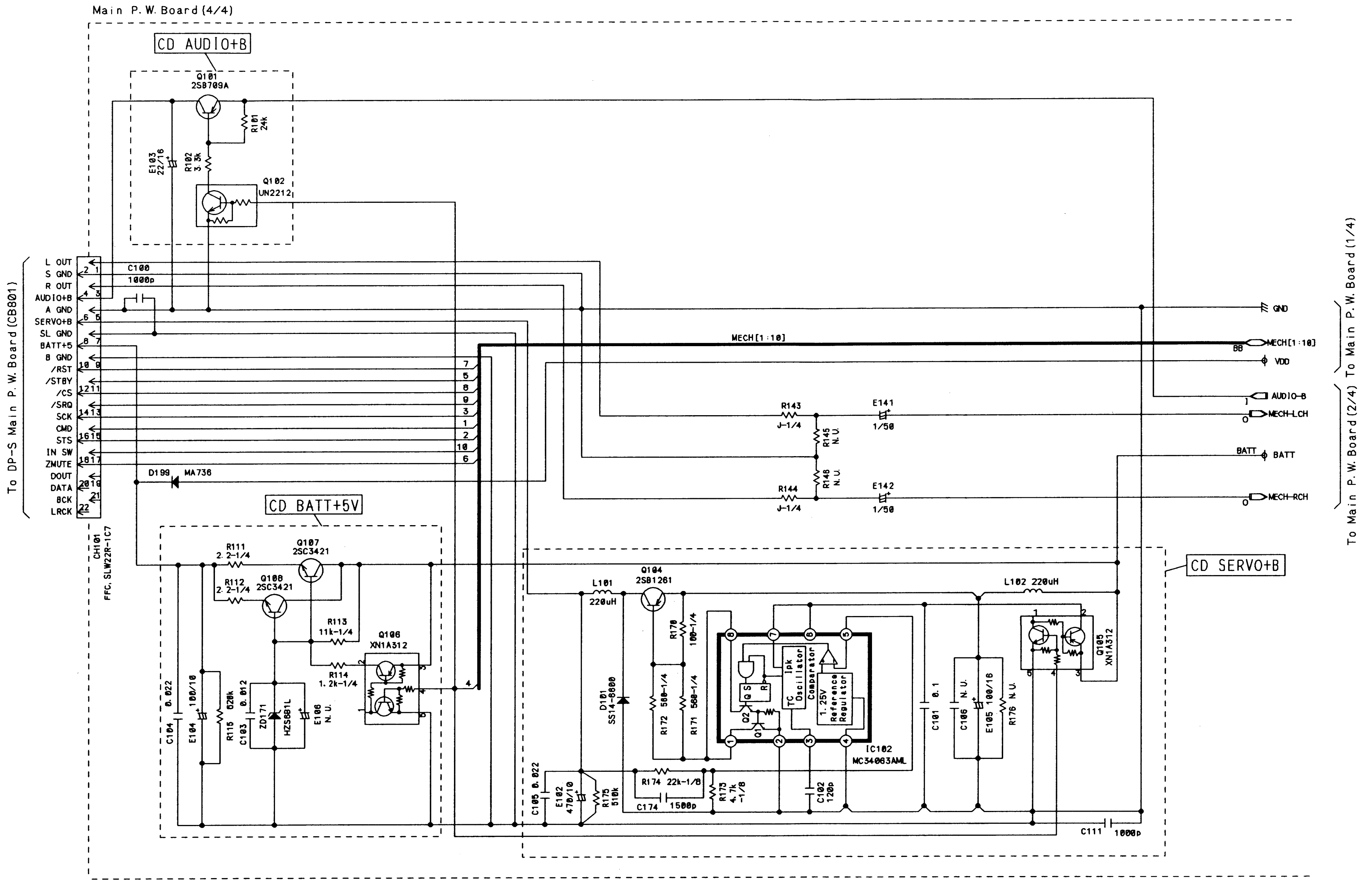
CDA-7865R Schematic Diagram (3/6)

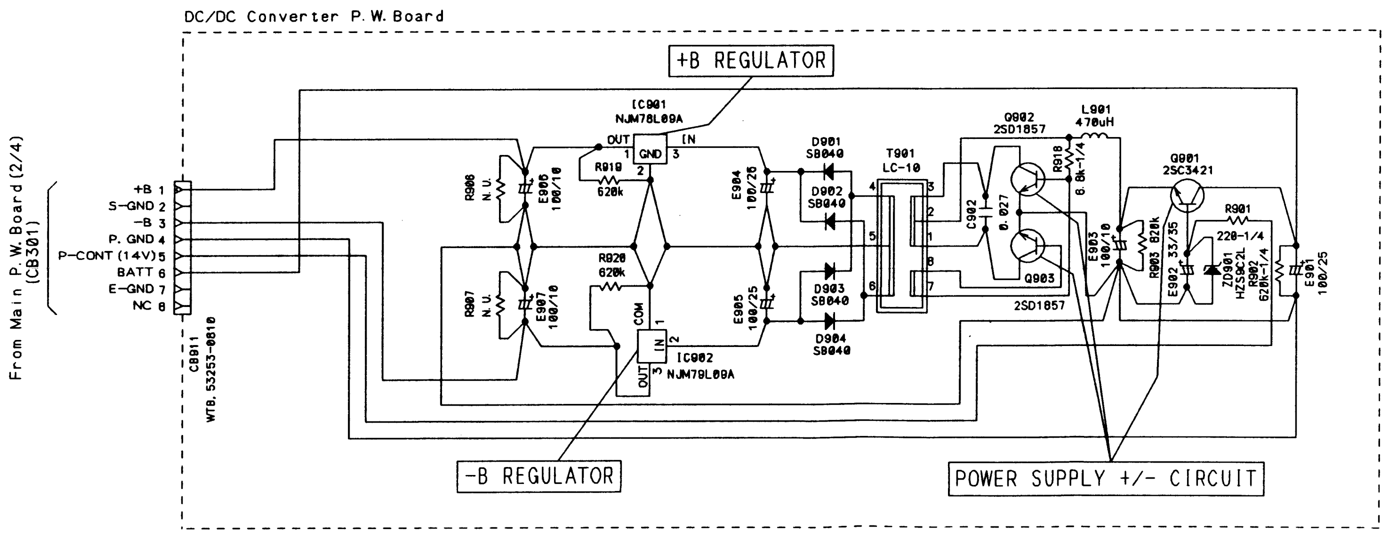
Main P.W. Board (3/4)


MUTE-DRIVER
Q825 XN1A312
Q826 UN2211
Q824 UN2212
Q827 N.U.
IC804 NJM2903M (2/2)
IC804 NJM2903M (1/2)
Q821 2SB709A
Q823 UN2112
Q822 2SD601A
D807 MA152WA
D808 MA152WK
D806 1SS133
Ai-NET BUS-I/F
D830 1SS353
Q830 UN2112
STEREO KEEPING CIRCUIT (AFTER SEEK)
To Main P.W. Board (2/4)
A-MUTE
BATT
AUDIO-B
(S-GND)
POWER-ON-B
MAIN[1:24]
W003
GND
TP804
TP803
M601 MOTOR, LOAD FF-050SK (NOSE MOTOR/7V-370mA)
NOSE MOTOR1
NOSE MOTOR2
CH601 ASSY, CONN 2P
CB601 WTB, 53253-0210
To Main P.W. Board (1/4)
RESET
VDD
CHG-BUS[1:2]
A/B-DET[1:2]
MOTOR-FOR
MOTOR-REV
RESET-SW
INV-B
REMOCON
NOSE-ON-5V
MOTOR-DRIVER
IC810 BA6219BFP
CONTROL CIRCUIT
HEAT SHUTDOWN CIRCUIT
D811 MA159
ZD806 HZS4BLL
MOTOR+B
Q807 2SD1994A
Q840 2SD1994A
Q808 XN1A312
ZD805 HZS12A1L
ACC+5V
Q804 XN1A311
Q803 XN1A312
D802 1SS353
ACC-DET
VDD +5V
Q820 XN1A312
To Main P.W. Board (2/4)
CHG-LCH-IN
CHG-GND-IN
CHG-RCH-IN
(S-GND)
R-R
R-L
F-R
F-L
GND
POWER-AMP
IC301 TDA7560
VCC2
VCC1
S-GND
TAB
SVR
AC-GND
ST-BY
MUTE
IN1
IN2
IN3
IN4
OUT1+
OUT1-
P-GND1
OUT2+
OUT2-
P-GND2
OUT3+
OUT3-
P-GND3
OUT4+
OUT4-
P-GND4
D301–D308 MA735
E305 1/50
E306 1/50
E307 47/35
R301 10k
REGULATOR IC (For VDD 12V IC)
IC302 STK475-010
DIN802-1 ASSY, DIN 7865RO
Lch
S-GND
Rch
GND
BATT
BUS+
BUS-
ACC
CB802 WTB, 53253-0510
CB803 WTB, 53253-0310
PWR ON+B
Q801 2SB1243
Q802 UN221F
VDD/BAT-DET/RESET
IC801 TDA3606AT
Reg
loaddump protection
reference
Battery buffer
ACC-DET
ZD801 HZS7B3L
L806 4.7uH
D810 S1G-6601
P-ANT/OUT-REM
Q817 UN211H
Q815 2SB1243
Q873 N.U.
Q820 UN2212
D804 MA153
Q819 UN221L
Q874 N.U.
CB801 WTB, FI69001-16
BATT
RL-
RL+
RR-
RR+
O-REM
P-ANT
GND
FL-
FL+
FR-
FR+
DIMMER
IN-INT
ACC
REMOCON I/F CIRCUIT
JK601 JAC, HSJ0867-01-1010+
5V
REM IN
GND
D602 MA152WK
Q605 UN2211
Q604 UN2211
Q606 UN2211
Q607 2SB709A
BUZZER
BZ601 CD11PA-XZ
Q603 UN2212
CFL+B (12V)
Q806 2SD1994A
Q872 2SD1994A
Q805 XN1A312
ZD802 HZS11C3L
DIMMER
Q602 UN2212
IN-INT
Q601 UN211L
D601 MA152WK
R890 N.U.

NOTE N.U. is Not Used Part

Schematic Diagram (4/6)


Main P.W. Board (4/4)
CD AUDIO+B
Q101
2SB709A
R101
24k
E103
22/16
R102
3.3k
Q102
UN2212
To DP-S Main P.W. Board (CB801)
L OUT
S GND
R OUT
AUDIO+B
A GND
SERVO+B
SL GND
BATT+5
B GND
/RST
/STBY
/CS
/SRQ
SCK
CMD
STS
IN SW
ZMUTE
DOUT
DATA
BCK
LRCK
CH101
FFC, SLW22R-1C7
C100
1000p
D199
MA736
MECH[1:10]
BB
GND
VDD
AUDIO-B
MECH-LCH
BATT
MECH-RCH
To Main P.W. Board (1/4)
To Main P.W. Board (2/4)
R143
J-1/4
R145
N.U.
R146
N.U.
R144
J-1/4
E141
1/50
E142
1/50
CD BATT+5V
R111
2.2-1/4
R112
2.2-1/4
Q107
2SC3421
Q108
2SC3421
R113
11k-1/4
R114
1.2k-1/4
Q106
XN1A312
C104
0.022
E104
100/10
R115
620k
C103
0.012
ZD171
HZS6B1L
E106
N.U.
CD SERVO+B
L101
220uH
Q104
2SB1261
R170
100-1/4
R172
560-1/4
R171
560-1/4
D101
SS14-6600
Ipk
Oscillator
TC
Comparator
1.25V
Reference
Regulator
Q1
Q2
IC102
MC34063AML
L102 220uH
Q105
XN1A312
C101
0.1
C106
N.U.
E105
100/16
R176
N.U.
C105 0.022
E102
470/10
R175
510k
R174 22k-1/8
C174 1500p
R173
4.7k
-1/8
C102
120p
C111
1000p

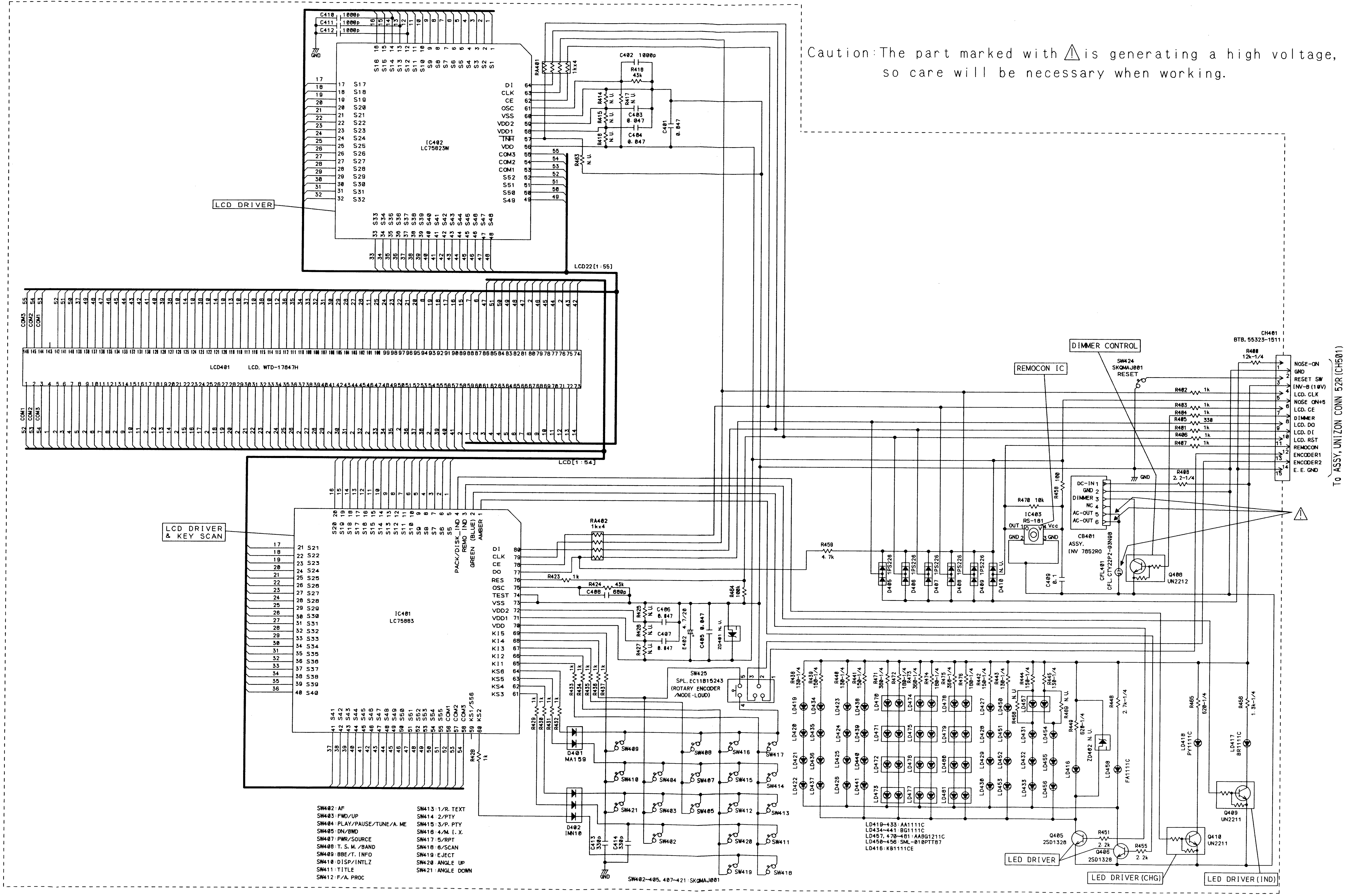

DC/DC Converter P.W. Board
+B REGULATOR
-B REGULATOR
POWER SUPPLY +/- CIRCUIT
From Main P.W. Board (2/4) (CB301)
+B 1
S-GND 2
-B 3
P.GND 4
P-CONT (14V) 5
BATT 6
E-GND 7
NC 8
CB911
WTB, 53253-0810
IC901
NJM78L09A
OUT
GND
IN
R919
620k
R920
620k
IC902
NJM79L09A
COM
R906
N.U.
E906
100/10
R907
N.U.
E907
100/10
E904
100/25
E905
100/25
D901
SB040
D902
SB040
D903
SB040
D904
SB040
T901
LC-10
C902
0.027
Q902
2SD1857
Q903
2SD1857
R918
6.8k-1/4
L901
470uH
Q901
2SC3421
E903
100/10
R903 820k
E902 33/35
ZD901
HZS9C2L
R901
220-1/4
R902
620k-1/4
E901
100/25

NOTE: N. U. is Not Used Parts.

CDA-7865R Schematic Diagram (5/6)

Front P.W. Board

Caution: The part marked with ⚠ is generating a high voltage, so care will be necessary when working.

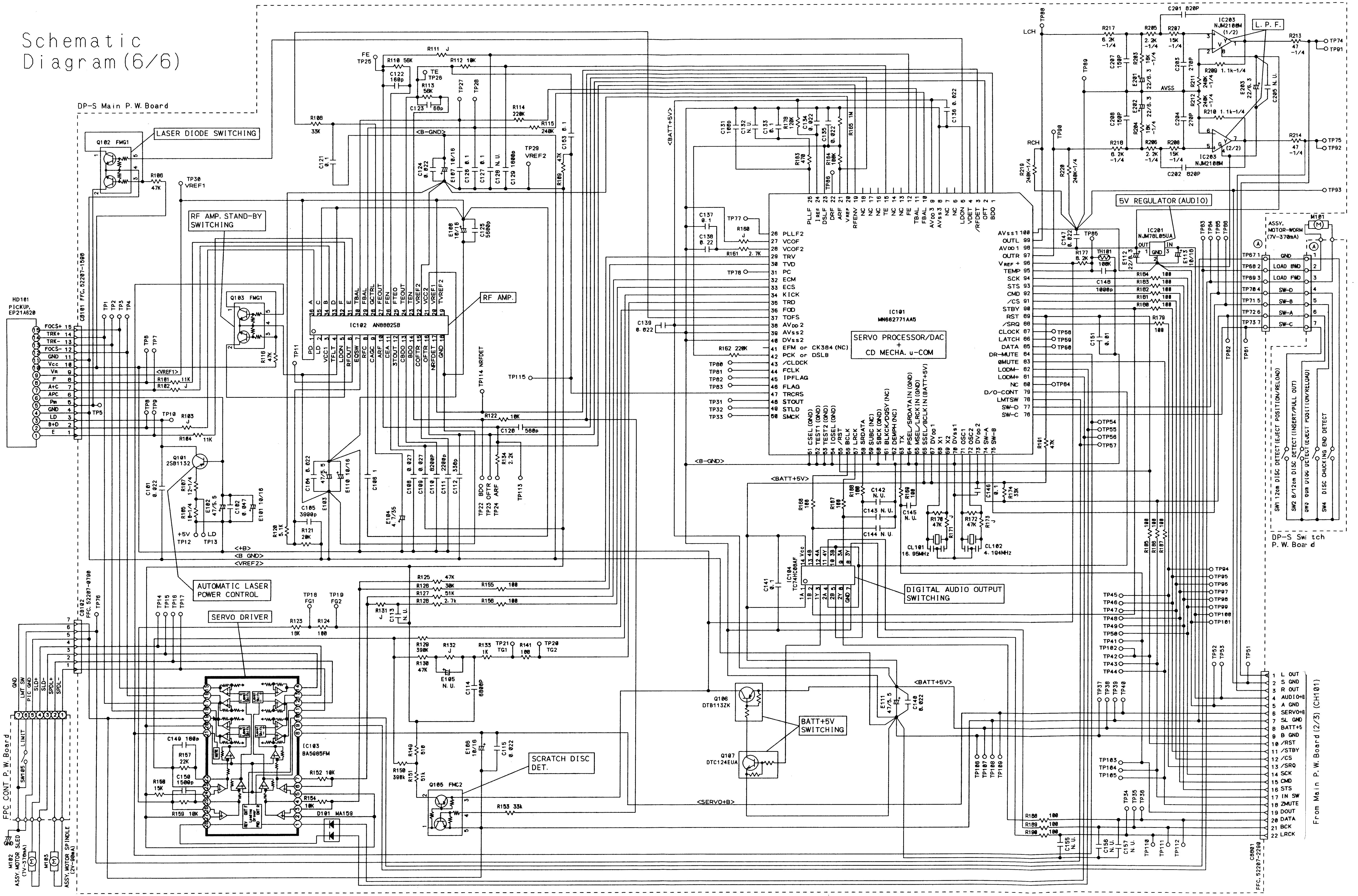

C410 1000p
C411 1000p
C412 1000p
GND
IC402
LC75823W
LCD DRIVER
DI
CLK
CE
OSC
VSS
VDD2
VDD1
INH
VDD
COM3
COM2
COM1
RA401 1k×4
C402 1000p
R410 43k
R414 N.U.
R417 N.U.
R415 N.U.
C403 0.047
R416 N.U.
C404 0.047
C401 0.047
R403 N.U.
LCD22[1:55]
LCD401 LCD, WTD-17847H
COM1
COM2
COM3
LCD[1:54]
IC401
LC75883
LCD DRIVER & KEY SCAN
PACK/DISK_IND
REMO (BLUE)
GREEN
AMBER
DO
RES
TEST
RA402 1k×4
R423 1k
R424 43k
C408 680p
R425 N.U.
C406 0.047
R426 N.U.
C407 0.047
R427 N.U.
E402 4.7/20
C405 0.047
ZD401 N.U.
R404 100k
SW425
SPL, EC11B15243
(ROTARY ENCODER /MODE·LOUD)
R428 1k
R429
R430
R431
R432
R433 1k
R434 1k
R435 1k
R436 1k
R437 1k
D401 MA159
D402 IMN10
C413 330p
C414 330p
GND
SW402–405, 407–421 : SKQMAJ001
R459 4.7k
D405 1PS226
D406 1PS226
D407 1PS226
D408 1PS226
D409 1PS226
D410 N.U.
REMOCON IC
R470 10k
R458 100
IC403
RS-101
OUT
Vcc
GND
C409 0.1
CB401
ASSY, INV 7852R0
DC-IN
DIMMER
NC
AC-OUT
CFL401
CFL, CTY22P2-93N00
DIMMER CONTROL
SW424
SKQMAJ001
RESET
Q408
UN2212
R402 1k
R403 1k
R404 1k
R405 330
R401 1k
R406 1k
R407 1k
R408 2.2-1/4
CH401
BTB, 55323-1511
R400 12k-1/4
1 NOSE-ON
GND
2 RESET SW
3 INV-B (10V)
4 LCD. CLK
5 NOSE ON+5
6 LCD. CE
7 DIMMER
8 LCD. DO
9 LCD. DI
10 LCD. RST
11 REMOCON
12 ENCODER1
13 ENCODER2
14 E. E. GND
15
To ASSY, UNIZON CONN 52R (CH501)
⚠
R438 150-1/4
R439 150-1/4
R440 130-1/4
R441 150-1/4
R471 360-1/4
R472 180-1/4
R473 360-1/4
R474 180-1/4
R475 360-1/4
R476 180-1/4
R442 150-1/4
R443 130-1/4
R444 130-1/4
R445 130-1/4
R468 N.U.
R469 N.U.
R449 620-1/4
ZD402 N.U.
R448 2.7k-1/4
LD450 FA1111C
LD416
R465 620-1/4
R456 1.3k-1/4
LD418 PY1111C
LD417 BR1111C
Q409 UN2211
Q405 2SD1328
R451 2.2k
Q406 2SD1328
R455 2.2k
Q410 UN2211
LED DRIVER
LED DRIVER (CHG)
LED DRIVER (IND)
SW402 – SW421
LD419 – LD481

SW402 : AF
SW403 : FWD/UP
SW404 : PLAY/PAUSE/TUNE/A. ME
SW405 : DN/BWD
SW407 : PWR/SOURCE
SW408 : T. S. M. /BAND
SW409 : BBE/T. INFO
SW410 : DISP/INTLZ
SW411 : TITLE
SW412 : F/A. PROC
SW413 : 1/R. TEXT
SW414 : 2/PTY
SW415 : 3/P. PTY
SW416 : 4/M. I. X.
SW417 : 5/RPT
SW418 : 6/SCAN
SW419 : EJECT
SW420 : ANGLE UP
SW421 : ANGLE DOWN

LD418~433 : AA1111C
LD434~441 : BG1111C
LD457, 470~481 : AABG1211C
LD450~456 : SML-010PTT87
LD416 : KB1111CE

NOTE : N. U. is Not Used Parts.

Schematic Diagram (6/6)


DP-S Main P.W. Board
LASER DIODE SWITCHING
Q102 FMG1
RF AMP. STAND-BY SWITCHING
Q103 FMG1
RF AMP.
IC102 AN8802SB
HD101 PICKUP, EP21A620
CB101 FFC, 52207-1500
AUTOMATIC LASER POWER CONTROL
Q101 2SB1132
SERVO DRIVER
IC103 BA5985FM
CB102 FFC, 52207-0700
SCRATCH DISC DET.
Q105 FMC2
D101 MA159
FPC CONT P.W.Board
SW105 LIMIT
M102 ASSY,MOTOR SLED (7V-370mA)
M103 ASSY,MOTOR SPINDLE (2V-90mA)
IC101 MN662771AA5
SERVO PROCESSOR/DAC + CD MECHA. u-COM
DIGITAL AUDIO OUTPUT SWITCHING
IC104 TC74HC08AF
CL101 16.95MHz
CL102 4.194MHz
BATT+5V SWITCHING
Q106 DTB113ZK
Q107 DTC124EUA
5V REGULATOR (AUDIO)
IC201 NJM78L05UA
L. P. F.
IC203 NJM2100M (1/2)
IC203 NJM2100M (2/2)
LCH
RCH
ASSY, MOTOR-WORM (7V-370mA)
M101
DP-S Switch P.W. Board
SW1 12cm DISC DETECT(EJECT POSITION/RELOAD)
SW2 8/12cm DISC DETECT(INSERT/PULL OUT)
SW3 8cm DISC DETECT(EJECT POSITION/RELOAD)
SW4 DISC CHUCKING END DETECT
CB001 FFC, 52207-2200
From Main P.W. Board (2/3) (CH101)
1 L OUT
2 S GND
3 R OUT
4 AUDIO+B
5 A GND
6 SERVO+B
7 SL GND
8 BATT+5
9 B GND
10 /RST
11 /STBY
12 /CS
13 /SRQ
14 SCK
15 CMD
16 STS
17 IN SW
18 ZMUTE
19 DOUT
20 DATA
21 BCK
22 LRCK

NOTE : N. U. is Not Used Parts.

Terminal Voltage of IC/TR

IC001		
1	8.42V	
2	4.97V	
3	4.97V	
4	8.42V/0V	POWER ON/SEEK
5	0V	

IC002	
1	8.42V
2	5.0V
3	5.0V
4	0V
5	5.0V
6	5.0V
7	8.42V
8	8.45V

IC005			
1	0V	11	0V
2	0V	12	0V
3	0V	13	0V
4	PS	14	4.9V
5	PS	15	0V
6	0V	16	4.9V
7	4.9V	17	2.46V
8	PS	18	2.46V
9	PS	19	2.44V
10	PS	20	2.44V

IC102			
1	14.4V	5	0V
2	0V	6	14.4V
3	0V	7	14.4V
4	0V	8	14.4V

IC201					
1	4.44V	6	0V	11	4.44V
2	4.44V	7	0V	12	8.82V
3	4.45V	8	0V	13	8.82V
4	4.44V	9	4.44V	14	8.87V
5	0V	10	4.44V		

IC202									
1	4.40V	10	NC	19	0V	28	4.44V	37	4.44V
2	4.40V	11	4.40V	20	PS	29	4.44V	38	4.44V
3	4.40V	12	4.42V	21	PS	30	4.44V	39	4.44V
4	4.40V	13	4.40V	22	8.87V	31	4.43V	40	4.44V
5	4.40V	14	4.45V	23	NC	32	4.43V	41	NC
6	4.40V	15	0V	24	NC	33	4.43V	42	NC
7	NC	16	4.87V	25	4.44V	34	4.43V	43	NC
8	NC	17	NC	26	4.44V	35	4.43V	44	NC
9	NC	18	3.63V	27	4.44V	36	4.43V		

IC203				
1	4.38V		11	0V
2	4.40V		12	8.69V
3	4.40V		13	9.36V
4	4.40V		14	4.38V
5	4.40V		15	4.36V
6	4.38V		16	4.38V
7	4.41V		17	4.38V
8	0V		18	4.38V
9	4.66V/0V	BBE ON/OFF	19	4.38V
10	4.66V/0V	BBE ON/OFF	20	4.36V

IC204	
1	4.46V
2	4.46V
3	4.46V
4	0V
5	4.46V
6	4.46V
7	4.46V
8	8.75V

IC206			
1	2.48V	10	PS
2	1.51V	11	PS
3	0V	12	PS
4	NC	13	NC
5	NC	14	4.93V
6	NC	15	NC
7	2.49V	16	0V
8	2.49V	17	0V
9	4.93V	18	0V

IC254		
1	2.93V	
2	2.93V	
3	0V	
4	8.44V/0V	POWER ON/SEEK
5	8.44V	

IC301				
1	0V	14	6.82V	
2	0V	15	6.81V	
3	6.68V	16	6.86V	
4	4.98V	17	6.81V	
5	6.68V	18	0V	
6	14.10V	19	6.73V	
7	6.63V	20	14.10V	
8	0V	21	6.66V	
9	6.63V	22	0V/5.32V	MUTE ON/OFF
10	6.91V	23	6.65V	
11	6.82V	24	0V	
12	6.79V	25	NC	
13	0V			

IC302	
1	0V
2	0V
3	NC
4	14.10V
5	14.10V
6	14.10V
7	0V
8	0V
9	14.4V
10	14.4V
11	14.4V
12	14.4V

IC310	
1	0V
2	0V
3	NC
4	−8.94V
5	0V
6	0V
7	0V
8	8.98V

IC311	
1	0V
2	0V
3	NC
4	−8.94V
5	0V
6	0V
7	0V
8	8.98V

IC312	
1	0V
2	0V
3	NC
4	−8.94V
5	0V
6	0V
7	0V
8	8.98V

IC401								
1	4.54V	at AMBER LED ON	63	4.86V		73	0V	
2	4.54V	at BLUE LED ON	64	4.86V		74	0V	
3	4.78V	at REM IND ON	65	0V		75	PS	OSC
4	4.78V	at CHG IND ON	66	0V		76	4.86V	RES:at IND ON
5～55	PS	SEGMENT	67	0V		77	PS	DO
56～58	PS	COM	68	0V		78	PS	DI
59	NC		69	0V		79	PS	CL
60	4.86V		70	4.86V		80	PS	CE
61	4.86V		71	3.24V				
62	4.86V		72	1.65V				

IC402					
1～52	PS	SEGMENT	60	0	
53～55	PS	COM	61	PS	OSC
56	4.86		62	PS	CE
57	4.84	INH:at IND ON	63	PS	CL
58	3.24		64	PS	DI
59	1.65				

IC403		
1	PS	OUT
2	0	
3	0	
4	4.8	VCC

IC501							
1	NC	35	PS		69	5.05V	
2	NC	36	5.0V		70	0V	
3	NC	37	PS		71	0V/4.82V	MUTE ON/OFF
4	4.98V	38	PS		72	0V	
5	0V	39	PS		73	4.96V/0V	UNIZON ACTIVE/STOP
6	PS	40	PS		74	NC	
7	PS	41	PS		75	NC	
8	PS	42	PS		76	NC	
9	5.0V	43	0V/5V	MUTE ON/OFF	77	NC	
10	PS	44	PS		78	NC	
11	PS	45	PS		79	PS	
12	0V	46	PS		80	PS	
13	NC	47	PS		81	5.0V	
14	NC	48	PS		82	5.0V	
15	5.0V	49	NC		83	5.0V	
16	5.0V	50	NC		84	5.0V	
17	5.0V	51	0V/5V	DIMMER ON/OFF	85	5.0V	
18	NC	52	NC		86	5.0V	
19	PS	53	NC		87	PS	
20	PS	54	4.9V/0V	IN-INT ON/OFF	88	0V/5.0V	
21	5.23V	55	0V/4.96V	UNIZON CLOSE/OPEN	89	NC	
22	NC	56	4.97V/0V	UNIZON CLOSE/OPEN	90	5.0V	
23	5.0V	57	4.61V/0V	BW ON/OFF	91	PS	
24	5.0V	58	PS		92	NC	
25	0V	59	PS		93	NC	
26	2.5V	60	5V/0V	DOOR OPEN/CLOSE	94	0V	
27	0～5.0V	61	PS		95	NC	
28	PS	62	PS		96	NC	
29	4.89V	63	PS		97	NC	
30	0V	64	PS		98	NC	
31	0V	65	PS		99	NC	
32	5V	66	4.66V/0V	BBE ON/OFF	100	5V	
33	0V	67	0V				
34	PS	68	4.66V/0V	BBE ON/OFF			

IC502							
1	5.0V	34	0V/5V	MUTE ON/OFF	68	0V	
2	NC	35	0V		69	4.96V/0V	POWER ON/SEEK
3	0V	36	0V		70	NC	
4	0V	37	0V		71	0V/5V	POWER ON/IF MUTE
5	0V	38	0V		72	2.88V/0V	FM/AM
6	PS	39	NC		73	PS	
7	PS	40	NC		74	PS	
8	0V	41	NC		75	PS	
9	5V	42	NC		76	0V/4.69V	POWER ON/SEEK
10	NC	43	NC		77	NC	
11	NC	44	NC		78	0V/5V	POWER ON/SD
12	NC	45	PS		79	0V/4.89V	POWER ON/MOD. ON
13	NC	46	PS		80	5V	
14	NC	47	NC		81	NC	
15	NC	48	NC		82	5V/0V	LO/DX
16	NC	49	NC		83	NC	
17	NC	50	5V		84	0V	
18	NC	51	NC		85	0～5V	
19	NC	52	NC		86	0V	
20	NC	53	PS		87	0V	
21	NC	54	PS		88	0V	
22	NC	55	PS		89	0V	
23	0V	56	PS		90	0V	
24	NC	57	PS		91	0V	
25	NC	58	0V		92	0V	
26	NC	59	0V		93	5V	
27	NC	60	0V		94	5V	
28	NC	61	0V		95	NC	
29	NC	62	0V		96	NC	
30	NC	63	PS		97	5V	
31	NC	64	PS		98	NC	
32	NC	65	NC		99	PS	
33	NC	66	NC		100	NC	
		67	4.96V/0V	POWER ON/SEEK			

IC503	
1	0V
2	0V
3	0V
4	0V
5	PS
6	PS
7	0V
8	5.03V

IC801					
1	0V	8	0V	15	5.03V
2	0V	9	0V	16	5.03V
3	0V	10	0V	17	14.4V
4	0V	11	0V	18	0V
5	NC	12	0V	19	0V
6	2.72V	13	0V	20	0V
7	0V	14	4.07V		

IC804		
1	PS	connect CHG
2	PS	connect CHG
3	PS	connect CHG
4	0V	
5	2.45V	connect CHG
6	PS	connect CHG
7	PS	connect CHG
8	4.9V	

IC810					
1	NC	10	12.0V	19	0V
2	0V	11	0V	20	0V
3	NC	12	NC	21	0V
4	4.00V	13	12.0V	22	NC
5	NC	14	NC	23	NC
6	0V	15	4.93V	24	4.93V
7	0V	16	NC	25	NC
8	3.93V	17	NC		
9	NC	18	NC		

IC901	
1	9V
2	0V
3	13.5V

IC902	
1	0V
2	-13.5V
3	-9V

	1	2	3	4	5	MODE
Q009	NC	4.99V/0V	5.01V	4.61V/0V	0V	BW ON/OFF
Q010	NC	4.9V/0V	5.03V/0V	8.52V/0V	0V	POWER ON/OFF
Q105	NC	0V/14.4V	14.4V	0V/4.38V	0V	POWER ON/CD
Q106	NC	0V/14.4V	14.4V	0V/4.38V	0V	POWER ON/CD
Q201	0V/14.4V	14.4V/0V	0V/5.05V	0V	5.05V/0V	SUB ON/OFF
Q803	NC	4.98V	5.00V	5.97V	0V	
Q804	NC	4.96V	5.03V	4.98V	0V	
Q805	NC	14.3V/0V	14.4V	4.76V/0V	0V	POWER ON/OFF
Q808	NC	14.26V/0V	14.3V	4.96V/0V	0V	UNIZON ACTIVE/STOP
Q814	0V/8.52V	0V/8.51V	8.52V	2.88V/0V	0V	FM/AM
Q825	NC	14.33V/0V	14.4V	3.77V/0V	0V	MUTE ON/OFF
Q828	NC	5.00V	5.03V	4.07V	0V	

	1	2	3	4	5	6	MODE
Q321	0V	0V	0V	8.32V/0V	0V	8.32V/0V	MUTE ON/OFF
Q323	0V	0V	0V	8.32V/0V	0V	8.32V/0V	MUTE ON/OFF

	E	C	B	MODE
Q002	0V	8.45V	5.02V/0V	LOCAL/DX
Q003	0V	0V	0V/2.5V	POWER ON/SEEK
Q005	0V	0V	0V/1.96V	POWER ON/SEEK
Q101	8.89V	8.87V	8.18V	
Q102	0V	0V	4.38V	
Q104	14.3V	7.35V	13.97V	

	E	C	B	MODE
Q107	5.89V	14.4V	14.3V	
Q108	5.89V	14.4V	14.3V	
Q202	0V	3.7V	0V/2.2V	POWER ON/IF MUTE
Q203	0V	0V	0V/2.77V	POWER ON/SEEK
Q254	0V	8.44V/0V	0V/4.69V	POWER ON/SEEK
Q280	0V	PS	PS	
Q405	0.03V	0.09V	0.74V	at BLUE LED ON
Q406	0.03V	0.1V	0.73V	at AMBER LED ON
Q408	0.03V	7.35V	1.44V	at DIMMER ON
	0.04V	0.05V	4.39V	at DIMMER OFF
Q409	0.03V	0.08V	4.78V	at REM IND ON
Q410	0.03V	0.11V	4.78V	at CHG IND ON
Q501	5.03V	4.93V	0V	
Q502	0V	0V	4.82V	
Q601	5.1V/5.1V	5.09V/0V	3.29V/5.1V	IN-INT ON/OFF
Q602	0V/0V	0V/4.96V	9.89V/0V	ILLM(DIMMER)ON/OFF
Q603	0V/0V	PS/0V	PS/0V	BUZZER ON/OFF
Q604	0V	0V	1.89V	
Q605	0V	0V	0V	
Q606	0V	4.8V	0V	
Q607	5.05V	0V	5.04V	
Q645	0V	0V/7.85V	4.98V/0V	UNIZON OPEN/CLOSE
Q801	14.4V	14.4V	13.74V	
Q802	0V	0V	4.12V	
Q806	11.65V/0V	14.4V	12.3V/0V	POWER ON/OFF
Q807	0V/11.93V	14.4V	0V/14.26V	POWER ON/CD
Q809	8.75V/0V	14.4V	9.38V/0V	POWER ON/OFF
Q810	4.93V/0V	14.38V/0V	5.5V/0V	POWER ON/OFF
Q812	8.52V	8.45V/0V	0V/8.52V	FM/AM
Q813	8.52V	0V/8.48V	0V/7.8V	FM/AM
Q816	13.15V/14.18V	13.15V/0V	12.51V/14.14V	ANT,REM/500mA OVER
Q817	14.04V/14.18V	0.59V/14.17V	13.59V/13.44V	ANT,REM/500mA OVER
Q819	0V/0V	0.09V/14.17V	3.63V/0.62V	ANT,REM/500mA OVER
Q820	0V/0V	13.51V/0V	0.56V/9.72V	ANT,REM/500mA OVER
Q821	4.9V	1.99V	4.99V	connect CHG
Q822	0V	2.98V	0V	connect CHG
Q823	4.99V	1.99V	4.99V	connect CHG
Q824	0V	3.77V/0V	0V/4.82V	MUTE ON/OFF
Q826	0V	3.77V/0V	0V/5.19V	MUTE ON/OFF
Q830	4.96V	4.96V/2.55V	4.96V/0V	POWER ON/SEEK
Q840	0V/11.93V	14.4V	0V/14.26V	POWER ON/CD
Q870	8.53V/0V	14.38V/0V	9.13V/0V	POWER ON/OFF
Q871	0V	9.13V	8.53V	
Q872	11.65V/0V	14.4V	12.3V/0V	POWER ON/OFF
Q901	9.5V	10V	14.5	
Q902	0V	PS	PS	
Q903	0V	PS	PS	

[Measuring Conditions]

- Power Supply Voltage : DC14.4V
- Measuring Meter : Digital Multi Voltmeter
- Measuring Point Reference : Between GND
- Measuring Condition : Power ON, FM : 98.1MHz, No Modulation

(CD Deck Mechanism)

IC101

1	0.04V	23	2.6V	51~54	0.04V	80	NC
2	0.2V	24	1.25V	55	5.05V	81~83	0.05V
3	0.05V	25	1.77V	56~58	2.5V	84	4.93V
4	0.04V	26	NC	59	NC	85~87	NC
5	4.98V	27	0.04V	60	0.04V	88	5.05V
6, 7	NC	28	2.06V	61, 62	NC	89	5.03V
8	0.04V	29, 30	2.5V	63	0.05V	90	5V
9	5.03V	31	NC	64, 65	0.04V	91	0.02V
10, 11	—	32~36	2.5V	66, 67	5.05V	92, 93	5.03V
12	2.5V	37	2.2V	68, 69	OSC	94	4.96V
13, 14	NC	38	5.03V	70	0.04V	95	*
15	2.5V	39, 40	0.04V	71, 72	OSC	96	4.96V
16~18	NC	41	NC	73	5.05V	97	2.51V
19	0.02V	42	2.83V	74	5.01V	98	5.02V
20	2.5V	43~46	NC	75~77	0.03V	99	2.51V
21	0.02V	47	0.04V	78	5.02V	100	0.03V
22	NC	48~50	NC	79	0.05V		

NOTE : * : Changing Voltage by Temperature

IC102

1	2.51V	11	3.01V	21	4.96V
2	4.7V	12	2.5V	22, 23	2.48V
3	4.95V	13	3.1V	24	2.49V
4	0.04V	14	0.05V	25	NC
5	2.47V	15	3.04V	26, 27	2.49V
6	2.84V	16	0.2V	28	2.38V
7	2.02V	17	0.05V	29, 30	—
8	2.83V	18	0.04V	31~35	2.53V
9	1.41V	19	NC	36	2.69V
10	1.73V	20	2.51V		

IC103

1	0.07V	17	3.21V
2~7	2.5V	18	3.24V
8	6.93V	19	0.04V
9, 10	0.06V	20	2.52V
11	2.93V	21	4.96V
12	3.62V	22, 23	2.51V
13	6.27V	24	2.49V
14	3.29V	25	2.46V
15	3.14V	26, 27	2.5V
16	3.37V	28	0.07V

IC104

1	5.04V
2	5V
3	5.03V
4, 5	0.05V
6~8	0.04V
9	2.53V
10	0.05V
11	0.04V
12	0.05V
13	2.5V
14	5.04V

IC201

1	5.03V
2	0.02V
3	8.01V

IC203

1	2.53V
2, 3	2.5V
4	0.02V
5~7	2.5V
8	5.02V

	E	C	B
Q101	4.36V	2.55V	3.69V
Q106	0.08V	0.12V	5.05V
Q107	0.12V	5.06V	4.99V

	1	2	3	4	5
Q102	0.09V	2.54V	6.09V	0.08V	5.01V
Q103	0.08V	2.51V	0.08V	0.08V	4.96V
Q105	5.03V	2.51V	5.03V	0.08V	0.07V

[Measuring Conditions]

- Power Supply Voltage : DC14.4V
- Measuring Meter : Digital Multi Voltmeter
- Measuring Point Reference : Between GND
- Measuring Condition : at playing Disc

Description of IC Terminal

D78F4218AGC : IC501

No.	Symbol	I/O	Terminal Description
1	NC	—	No connect terminal.
≀			
3			
4	CD-STBY	O	Stand-by signal output terminal to CD Mecha μ-com.
5	0 MUTE-DET	I	Zero mute signal input terminal from CD.
6	CD-LSI RST	O	Reset signal output terminal to CD Mecha μ-com.
7	CD-CS	O	Chip select signal output terminal to CD Mecha μ-com.
8	CD-SRQ	I	Communication REQ signal input terminal from CD Mecha μ-com.
9	V_{DD}	—	Power supply connect terminal.
10	X2	—	System clock OSC connct terminal. (12.288MHz)
11	X1		
12	V_{SS}	—	GND connect terminal.
13	XT2 (NC)	—	No connect terminal.
14	XT1 (NC)		
15	$\overline{\text{RESET}}$	I	Reset signal input terminal.
16	BAT-DET	I	BATT detect signal input terminal.
17	ACC-DET	I	ACC detect signal input terminal.
18	NC	—	No connect terminal.
19	BUS-IN	I	Ai-NET BUS data signal input terminal.
20	BUS-OUT	O	Ai-NET BUS data signal output terminal.
21	IN-SW	I	Disc insert detect SW signal input terminal.
22	NC	—	No connect terminal.
23	AV_{DD}	—	Power supply terminal of A/D converter.
24	AVref0	—	Reference voltage input terminal of A/D converter.
25	GND	—	GND connect terminal.
26	NOSE-ON	I	Nose ON / OFF detect signal input terminal.
27	FM/AM SM	I	FM / AM Signal Meter signal input terminal.
28	3834 A/D	I	SPE-ANA data signal input terminal.
29	T-SENS	I	Temperature detect signal input terminal of power AMP.
30	GND	—	GND connect terminal.
31			
32	AREA	I	Area set up signal input terminal.
33	AV_{SS}	—	GND connect terminal of A/D converter.
34	3834 SHIFT	O	SPE-ANA level switching signal output terminal.
35	DTS CE	O	Chip enable signal output terminal to DTS μ-com.
36	AVref1	—	Reference voltage input terminal of A/D converter.
37	DTS STS	I	System status signal input terminal from DTS μ-com.
38	DTS CMD	O	Serial data signal output terminal to DTS μ-com.

No.	Symbol	I/O	Terminal Description
39	DTS CLK	O	Serial clock signal output terminal to DTS μ-com.
40	CD-STS	I	Status signal input terminal from CD Mecha μ-com.
41	CD-CMD	O	Command signal output terminal to CD Mecha μ-com.
42	CD-SCK	O	Clock signal output terminal to CD Mecha μ-com.
43	DTS MUTE	I	MUTE signal input terminal from DTS μ-com.
44	LCD-RST	O	Reset signal output terminal to LCD Driver.
45	LCD-DO	I	Serial data signal input terminal from LCD Driver.
46	LCD-DI	O	Serial data signal output terminal to LCD Driver.
47	LCD-CLK	O	Serial clock signal output terminal to LCD Driver.
48	LCD-CE	O	Chip enable signal output terminal to LCD Driver.
49	NC	—	No connect terminal.
50			
51	$\overline{\text{IN DIMMER}}$	I	DIMMER control signal input terminal.
52	NC	—	No connect terminal.
53			
54	IN-INT	I	IN-INTERRUPT input terminal.
55	$\overline{\text{LIMIT SW 2}}$	I	Active Nose position detect signal input terminal.
56	$\overline{\text{LIMIT SW 1}}$		
57	BW	O	FM band width switching control signal output terminal.
58	MOTOR REV	O	Nose Motor control signal output terminal.
59	MOTOR FOR		
60	DOOR LED	O	LED signal output terminal for lighting of CD Loading Slot.
61	3834 A	O	Select signal output terminal to SPE-ANA IC.
62	3834 B		
63	3834 C		
64	EV-DATA	O	Serial data signal output terminal to E-VOL.
65	EV-CLK	O	Serial clock signal output terminal to E-VOL.
66	BBE-1	O	BBE control output terminal. (BBE)
67	BBE-2	O	BBE control output terminal. (PROCESS)
68	BBE-3	O	BBE control output terminal. (LO CONT)
69	LPF1	O	LPF control signal output terminal.
70	LPF2		
71	$\overline{\text{MUTE}}$	O	Audio mute signal output terminal.
72	V_{SS}	—	GND connect terminal.
73	MOTOR-CONT	O	Nose Motor power control signal output terminal.
74	NC	—	No connect terminal.
~			
78			

No.	Symbol	I/O	Terminal Description
79	ENCODER1	I	Encoder data signal input terminal.
80	ENCODER2		
81	V_{DD}	—	Power supply connect terminal.
82	POWER IC-ON	O	Stand-by control signal output terminal for power IC.
83	NOSE-PWR	O	LCD Driver power control signal output terminal.
84	CFL ON	O	LCD backlight power control output terminal.
85	PWR-CONT	O	Power control signal output terminal for audio and key lighting.
86	60W-CONT	O	60W AMP control signal output terminal.
87	DIMMER-CONT	O	DIMMER control signal (PWM) output terminal.
88	BUZZER	O	Guide tone buzzer signal output terminal.
89	NC	—	No connect terminal.
90	V-CONT	O	CD power control signal output terminal.
91	REMOCON	I	Remocon data input terminal.
92	NC	—	No connect terminal.
93			
94	V_{PP} (GND)	—	GND connect terminal.
95	NC	—	No connect terminal.
≀			
99			
100	$\overline{\text{Auto Adj}}$	I	Auto adjustment control signal input terminal.

MB89689PF : IC502

No.	Symbol	I/O	Terminal Description
1	V_{CC}	—	+5V connect terminal.
2	NC	—	No connect terminal.
3	X0A (GND)	—	GND connect terminal.
4	MOD0 (GND)		
5	MOD1 (GND)		
6	X0	O	Crystal connect terminal. (8MHz)
7	X1	I	
8	V_{SS}	—	GND connect terminal.
9	$\overline{\text{RESET}}$	I	Reset input terminal. (L : RESET)
10	NC	—	No connect terminal.
≀			
22			
23	$\overline{\text{AM ST}}$ (PULL-DOWN)	—	Pull-down connect terminal.

No.	Symbol	I/O	Terminal Description
24	NC	—	No connect terminal.
≀			
28			
29	AM $\overline{\text{ST}}$/MO (NC)		
30	$\overline{\text{FM DIVER}}$ (NC)		
31	NC		
≀			
33			
34	$\overline{\text{T-MUTE}}$	O	Tuner Mute output terminal. (L : MUTE ON)
35	NC (GND)	—	GND connect terminal.
≀			
38			
39	NC	—	No connect terminal.
≀			
44			
45	R$_\text{X}$D (PULL-UP)	I	RDS Monitor input terminal. (Pull-up connect)
46	T$_\text{X}$D	O	RDS Monitor output terminal.
47	NC	—	No connect terminal.
≀			
49			
50	V$_\text{CC}$	—	V$_\text{CC}$ connect terminal.
51	NC	—	No connect terminal.
52			
53	TUNER CLK	I	Clock input terminal from Main μ-com.
54	TUNER SI	I	Serial input terminal from Main μ-com.
55	TUNER SO	O	Serial output terminal to Main μ-com.
56	RDS SDA	I/O	RDS I2C data input / output terminal.
57	RDS CLK	O	RDS I2C CLK output terminal.
58	NC (GND)	—	GND connect terminal.
59	V$_\text{SS}$		
60	NC (GND)		
≀			
62			
63	E2P SDA	I/O	E2P-ROM data input / output terminal.
64	E2P CLK	O	E2P-ROM CLK output terminal.
65	Divider (NC)	—	No connect terminal.
66	Narrow (NC)		
67	$\overline{\text{SEEK Req.}}$	O	Seek speed control (Tuner) terminal. (L : Seeking)
68	NC (GND)	—	GND connect terminal.
69	$\overline{\text{AF HOLD}}$	O	AF HOLD output terminal. (L : at tuner set up HOLD)

No.	Symbol	I/O	Terminal Description
70	AF HOLD (NC)	—	No connect terminal.
71	IF MUTE	O	IF Mute control terminal. (H : Mute ON)
72	FM / $\overline{\text{AM}}$	O	FM / AM switching terminal. (H : FM)
73	PLL CLK	O	PLL clock output terminal.
74	PLL DATA	I/O	PLL data input / output terminal.
75	PLL CE	O	PLL CE output terminal.
76	SEEK Req.	O	Seek speed control (Tuner) terminal. (H : Seeking)
77	RDS RESET (NC)	—	No connect terminal.
78	SD	I	SD (Tuner) input terminal. (H : Station ON)
79	$\overline{\text{PSWN}}$	I	Audio signal level detect terminal from RDS Decoder. (L : No Station)
80	$\overline{\text{Auto Adj.}}$	I	Auto adjustment terminal. (L : Auto adjustment start)
81	TUNER ON (NC)	—	No connect terminal.
82	LO / $\overline{\text{DX}}$	O	Local / DX Seek (Tuner) switching terminal. (H : Local Seek)
83	NC	—	No connect terminal.
84	AV_{SS}	—	GND connect terminal.
85	S / M	I	Field strength (A / D, Tuner) input terminal.
86	M / P	I	Multipath rejection (A / D) input terminal.
87	NC (GND)	—	GND connect terminal.
≀			
92			
93	AV_{CC}	—	V_{CC} connect terminal.
94	AVR		
95	NC	—	No connect terminal.
96			
97	TUNER STBY	I	Stand-by input terminal from Main μ-com.
98	NC	—	No connect terminal.
99	DAVN	I	RDS data available input terminal.
100	NC	—	No connect terminal.

MN662771AA5 : IC101 (DP23S070)

No.	Symbol	I/O	Terminal Description
1	BDO	I	Drop-Out signal input terminal. H : Drop-Out
2	OFT	I	Off Track signal input terminal. H : Off Track
3	/RFDET	I	RF detect signal input terminal. L : detection
4	VDET	I	Vibration detect signal input terminal. H : detection
5	LDON	O	Laser ON signal output terminal. H : ON
6	NC	—	No connect terminal.
7			

No.	Symbol	I/O	Terminal Description
8	$AV_{SS}3$	—	GND connect terminal for analog circuit.
9	$AV_{DD}3$	—	Power supply terminal for analog circuit.
10	FBAL	O	Focus Balance adjustment output terminal.
11	TBAL	O	Tracking Balance adjustment output terminal.
12	FE	I	Focus Error signal input terminal. (Analog input)
13	NC	—	No connect terminal.
14			
15	TE	I	Tracking Error signal input terminal. (Analog input)
16	NC	—	No connect terminal.
~			
18			
19	RFENV	I	RF Envelope signal input terminal. (Analog input)
20	V_{REF}	I	V_{REF} input terminal.
21	ARF	I	RF signal input terminal. (for DSL)
22	DRF	I	Bias terminal for DSL.
23	DSLF	I/O	Roop Filter terminal for DSL.
24	I_{REF}	I	Reference current input terminal.
25	PLLF	I/O	Roop Filter terminal for PLL.
26	PLLF2	I/O	Characteristic Roop Filter switching terminal for PLL.
27	VCOF	I/O	Roop Filter terminal for VCO.
28	VCOF2	I/O	Digital Servo Processor (33.8688MHz) / Roop Filter terminal for VCO.
29	TRV	O	Traverse compulsion sending output terminal.
30	TVD	O	Traverse drive output terminal.
31	PC	O	Spindle motor ON output terminal.
32	ECM	O	Spindle motor driving signal terminal. (compulsion mode output) 3-State
33	ECS	O	Spindle motor driving signal terminal. (Servo Error signal output)
34	KICK	O	Kick Pulse output terminal. 3-State
35	TRD	O	Tracking Drive output terminal.
36	FOD	O	Focus Drive Output terminal.
37	TOFS	O	Tracking Offset adjustment output terminal.
38	$AV_{DD}2$	—	Power supply terminal for analog circuit (DSL, PLL, AD and DA block).
39	$AV_{SS}2$	—	GND connect terminal for analog circuit (DSL, PLL, AD and DA block).
40	$DV_{SS}2$	—	GND connect terminal for Digital circuit.
41	EFM or CK384 (NC)	—	No connect terminal.
42	PCK or DSLB	O	PLL Sampling Clock output terminal. (f_{PCK}=4.3218MHz) at default : PLL Samplig Clock output / at fulfillment Command : DSL Balance output
43	/CLDCK	O	Sub Code Frame Clock signal output terminal. (f_{CLDCK}=7.35KHz)
44	FCLK	O	Crystal Frame Clock signal output terminal. (f_{FCLK}=7.35KHz)
45	IPFLAG	O	Interpolation Flag signal output terminal. H : Interpolation
46	FLAG	O	Flag signal output terminal.

No.	Symbol	I/O	Terminal Description
47	TRCRS	I	Track Cross signal input terminal.
48	STOUT	O	Serial Data output terminal for monitor signal. (SENCE, NFLOCK, NTLOCK... etc.)
49	STLD	O	Load signal output terminal for monitor signal.
50	SMCK	O	Bit Clock signal output terminal for monitor signal. (f_{SMCK} = 4.2336MHz)
51	CSEL (GND)	—	GND connect terminal.
52	TEST1 (GND)		
53	TEST2 (GND)		
54	IOSEL (GND)		
55	/RST	I	Reset input terminal from CD Signal Processor LSI block. (L : Reset)
56	BCLK	O	Bit Clock output terminal for SRDATA.
57	LRCK	O	L / R discrimination signal output terminal.
58	SRDATA	O	Serial Data output terminal.
59	SUBC (NC)	—	No connect terminal.
60	SBCK (GND)	—	GND connect terminal.
61	BLKCK / DQSY (NC)	—	No connect terminal.
62	DEMPH (NC)		
63	TX	O	Digital Audio Interface signal output terminal.
64	PSEL / SRDATAIN (GND)	—	GND connect terminal.
65	MSEL / LRCKIN (GND)		
66	SSEL / BCLKIN (BATT+5V)	—	BATT+5V connect terminal.
67	DV$_{DD}$1	—	Power supply terminal for Digital circuit.
68	X1	I	Main Clock input terminal. (f=16.9344MHz)
69	X2	O	Main Clock output terminal. (f=16.9344MHz)
70	DV$_{SS}$1	—	GND connect terminal for Digital circuit.
71	OSC1	I	Clock Input terminal for µ-COM. (4.19MHz)
72	OSC2	O	Clock output terminal for µ-COM.
73	DV$_{DD}$2	—	Power supply terminal for Digital circuit.
74	SW-A	I	Mecha. control SW input terminal. (L : SW ON)
75	SW-B		
76	SW-C		
77	SW-D		
78	LMTSW	I	Pick-Up inner detect SW input terminal. (L : detection)
79	D / O-CONT	O	Digital Audio Data control output terminal. (H : D / O ON)
80	NC	—	No connect terminal.
81	LODM+	O	Loading motor control terminal.
82	LODM-		
83	0 MUTE	O	0 Data signal output terminal.
84	DR-MUTE	O	Servo Driver MUTE signal output terminal. (L : DR MUTE ON)

No.	Symbol	I/O	Terminal Description
85	DATA	O	DATA output terminal for Error monitor.
86	LATCH	O	LATCH output terminal for Error monitor.
87	CLOCK	O	CLOCK output terminal for Error monitor.
88	/SRQ	O	Status Request signal output terminal.
89	RST	I	µ-COM block reset terminal.
90	STBY	I	STBY signal input terminal.
91	/CS	I	Communication start / stop signal terminal.
92	CMD	I	Command input terminal.
93	STS	O	Status output terminal.
94	SCK	I	Clock input terminal for communication.
95	TEMP	I	A/D input terminal for temperature detect.
96	$V_{REF}+$	—	Power supply terminal for A/D converter.
97	OUTR	O	Rch Audio Output terminal.
98	$AV_{DD}1$	—	Power supply terminal for analog circuit. (for Audio output block(for using both as Lch and Rch))
99	OUTL	O	Lch Audio Output terminal.
100	$AV_{SS}1$	—	GND connect terminal for analog circuit. (for Audio output block(for using both as Lch and Rch))

CDA-7865R

Electrical Parts List

Capacitor : μF=microfarads,pF=picofarads

Abbreviations

RES. = Resistor
C.F. = Carbon Film
M.F. = Metal Film
M.O. = Metal OxideFilm
M.P. = Metal Plate
TR. = Transistor
TRANS. = Transformer
CP. = Chip

CAP. = Capacitor
ELY. = Electrolytic
CER. = Ceramic
MYL. = Mylar
TAN. = Tantalum
POLY. = Polystyrol
PP. = Polypropylene
PLT. = Polyethylene
PF. = Polyester Film

Symbol No.	Part No.	Description
Main P.W.Board		
IC's		
IC001	51T15731W10	TC7S66F-TE85L -CP
IC002	51T93332F01	IC,NJM2903M-TE3 -SE2
IC005	51T15132Y02	SAA6588T -SE9
IC102	51T15510W01	IC ,MC34063AML -SPD
IC201	51T15456Y01	TC74HC4066AFT-EL-SE5
IC202	51T35457Y01	TDA7402 -QT
IC203	51T15468Y02	NJM2150AV-TE1 -SE2
IC204	51T93333F01	NJM2904M-TE3 -SE2
IC206	51T95048W01	BA3834F -SE9
IC254	51T15731W10	TC7S66F-TE85L -CP
IC301	51T35403Y01	TDA7560 -ZS
IC302	51T15426Y02	STK475-010 -IB
IC310	51T15420Y01	BA4560F-E2 -SE2
IC311	51T15420Y01	BA4560F-E2 -SE2
IC312	51T15420Y01	BA4560F-E2 -SE2
IC501	51T35568Y13	MTP,D78F4218AGC
IC502	51T15161Y02	IC,MB89689PF-G110-QT
IC503	51T25160Y01	M24C04-WMN6T -SE2
IC801	51T95193W01	TDA3606AT -SE9
IC804	51T93332F01	IC,NJM2903M-TE3 -SE2
IC810	51T25448Y01	BA6219BFP-Y-E2 -SE9
Transistors		
Q002	48T64222F05	TR ,UN2215 10 -TX
Q003	48T64222F01	TR ,UN2211 10-10 -TX
Q005	48T64222F02	TR ,UN2212 22-22 -TX
Q009	48T45594W16	TR,XN1A311-TX -CP
Q010	48T45594W16	TR,XN1A311-TX -CP
Q101	48T52437F05	TR ,2SB709A-S /TX-CP
Q102	48T64222F02	TR ,UN2212 22-22 -TX
Q104	48T15511W02	CP.2SB1261-TE2 -E5
Q105	48T45594W12	TR ,XN1A312 -TX-CP
Q106	48T45594W12	TR ,XN1A312 -TX-CP
Q107	48T69176F02	TR ,2SC3421-Y
Q108	48T69176F02	TR ,2SC3421-Y
Q201	48T45594W08	TR ,XN1212 -TX-CP
Q202	48T64222F02	TR ,UN2212 22-22 -TX
Q203	48T45251W03	TR ,UN5212 22-22 -CP
Q254	48T94606F06	TR,DTC114EUA-T106-CP
Q280	48T64222F02	TR ,UN2212 22-22 -TX
Q321	48T25317Y01	TR,XN0F256-TX -CP
Q323	48T25317Y01	TR,XN0F256-TX -CP
Q501	48T64221F11	TR,UN211L-TX -CP
Q502	48T64222F02	TR ,UN2212 22-22 -TX
Q601	48T64221F11	TR,UN211L-TX -CP
Q602	48T64222F02	TR ,UN2212 22-22 -TX
Q603	48T64222F02	TR ,UN2212 22-22 -TX
Q604	48T64222F01	TR ,UN2211 10-10 -TX
Q605	48T64222F01	TR ,UN2211 10-10 -TX
Q606	48T64222F01	TR ,UN2211 10-10 -TX
Q607	48T52437F05	TR ,2SB709A-S /TX-CP
Q645	48T64222F01	TR ,UN2211 10-10 -TX
Q801	48T84366F03	TR,2SB1243-Q-TV2 -RD
Q802	48T64222F11	TR,UN221F-TX -CP
Q803	48T45594W12	TR ,XN1A312 -TX-CP
Q804	48T45594W16	TR,XN1A311-TX -CP
Q805	48T45594W12	TR ,XN1A312 -TX-CP
Q806	48T93828F04	TR,2SD1994A-S-TA -RD
Q807	48T93828F04	TR,2SD1994A-S-TA -RD
Q808	48T45594W12	TR ,XN1A312 -TX-CP
Q809	48T69176F02	TR ,2SC3421-Y
Q810	48T73023F01	TR ,2SD874A -E2
Q812	48T64221F13	TR,UN211H-TX -CP
Q813	48T63419F04	TR,CP.2SA1036K-HR-96
Q814	48T45594W16	TR,XN1A311-TX -CP
Q816	48T84366F03	TR,2SB1243-Q-TV2 -RD
Q817	48T64221F13	TR,UN211H-TX -CP
Q819	48T64222F12	TR,UN221L-TX -CP
Q820	48T64222F02	TR ,UN2212 22-22 -TX
Q821	48T52437F05	TR ,2SB709A-S /TX-CP
Q822	48T52438F04	TR ,2SD601A-S /TX-CP
Q823	48T64221F02	TR ,UN2112 22-22 -TX
Q824	48T64222F02	TR ,UN2212 22-22 -TX
Q825	48T45594W12	TR ,XN1A312 -TX-CP
Q826	48T64222F01	TR ,UN2211 10-10 -TX
Q828	48T45594W12	TR ,XN1A312 -TX-CP
Q830	48T64221F02	TR ,UN2112 22-22 -TX
Q840	48T93828F04	TR,2SD1994A-S-TA -RD
Q870	48T92368F04	TR,2SD1760 R -E5

Symbol No.	Part No.	Description
Q871	48T52438F04	TR ,2SD601A-S /TX-CP
Q872	48T93828F04	TR,2SD1994A-S-TA -RD

Diodes

D001	48T15437Y01	DIO,HSM123-TL -CP
D003	48T75404W01	DIO,1SS353-TE17 -CP
D101	48T65122W01	DIO,SHT SS14-6600-E1
D199	48T95572W01	DIO,SHT MA736-TX -E1
D203	48T75404W01	DIO,1SS353-TE17 -CP
D301	48T95572W01	DIO,SHT MA736-TX -E1
D302	48T95572W01	DIO,SHT MA736-TX -E1
D303	48T95572W01	DIO,SHT MA736-TX -E1
D304	48T95572W01	DIO,SHT MA736-TX -E1
D305	48T95572W01	DIO,SHT MA736-TX -E1
D306	48T95572W01	DIO,SHT MA736-TX -E1
D307	48T95572W01	DIO,SHT MA736-TX -E1
D308	48T95572W01	DIO,SHT MA736-TX -E1
D321	48T25651W01	DIO,CP MA152WA
D352	48T25651W01	DIO,CP MA152WA
D501	48T75404W01	DIO,1SS353-TE17 -CP
D502	48T75404W01	DIO,1SS353-TE17 -CP
D601	48T25651W02	DIO,MA152WK-TX -CP
D602	48T25651W02	DIO,MA152WK-TX -CP
D801	48T25609Y02	DIO,P600GL -
D802	48T75404W01	DIO,1SS353-TE17 -CP
D803	48T25593Y01	DIO,S1G-6601 -E1
D804	48T94335F01	DIO,MA153-CP
D806	48T68828F11	DIO,1SS133 -RH
D807	48T25651W01	DIO,CP MA152WA
D808	48T25651W02	DIO,MA152WK-TX -CP
D810	48T25593Y01	DIO,S1G-6601 -E1
D811	48T81063F01	DIO,CP.MA159 / TX-CP
D830	48T75404W01	DIO,1SS353-TE17 -CP
ZD171	48T25766W04	DIO,ZEN.HZS 6B1L -R5
ZD801	48T25766W15	DIO,ZEN.HZS 7B3L -R5
ZD802	48T25766W35	DIO,ZEN.HZS11C3L -R5
ZD803	48T25766W24	DIO,ZEN.HZS 9C1L -R5
ZD804	48T25766W02	DIO,ZEN.HZS 6A2L -R5
ZD805	48T25766W36	DIO,ZEN.HZS12A1L -R5
ZD806	48T25801W08	DIO,ZEN.HZS 4BLL -R5
ZD874	48T25766W03	DIO,ZEN.HZS 6A3L -R5

Coils

LO01	24T65172W17	IND,LEM4532 4R7K -E2
LO02	24T16403W29	COI,IND.15R-M -CP

Symbol No.	Part No.	Description
L010	24T16403W15	COI,IND.1R0-M K -CP
L011	24T16403W15	COI,IND.1R0-M K -CP
L012	24T16403W07	COI,IND.R22-M K -CP
L013	24T16403W15	COI,IND.1R0-M K -CP
L101	24T15313Y17	IND,CDRH104 221M -E6
L102	24T16271W13	COIL,RCR875D-221K
L501	24T16403W15	COI,IND.1R0-M K -CP
L806	24T16403W23	COI,IND.4R7-M -CP
VT001	24T15267Y01	COIL,7TL -DB

Crystals

XL001	91T85169W18	XTL,HC-49 4.332M -R5
XL501	91T95084W02	XTL,CS20 12.288M -E9
XL503	91T85169W44	XTL,HC-49 7.3728M-R5

LED's

LD601	48T65477W05	LED,SML-010DTT87 -CP(ORG)
LD602	48T65477W05	LED,SML-010DTT87 -CP(ORG)

Buzzer

BZ601	50T85541W01	BUZZER,CD11PA-XZ -H5

Filter

CF001	91T75257W02	LPF,LPF11830KH-3C-DB

Surge Protector

SA001	48T81048F02	PTT,DSP-201M -RD

Switch

SW332	40T45282W02	SW,SLIDE SLD-42-508X (Ai-NET・NORM/(EQ/DIV))

Thermistor

TH501	48T25250Y01	TMT,ERTJ1VV104J -CP

Symbol No.	Part No.	Description
Capacitors		
C001	08T15399W01	CAP,CER.223K-B1H -CP
C002	08T15399W01	CAP,CER.223K-B1H -CP
C003	08T15399W01	CAP,CER.223K-B1H -CP
C005	08S60102F46	CAP,CER 684K-B1E -CP
C008	08S65128F67	CAP,CER.682K-B1H -CP
C009	08S82122F53	CAP,CER.471J-CH1H-CP
C012	08S60102F40	CAP,CER 224K-B1E -CP
C016	08S65128F61	CAP,CER.222K-B1H -CP
C018	08S45677W48	CAP,CER.331J-CH1H-CP
C019	08S45677W36	CAP,CER.101J-CH1H-CP
C020	08S65128F69	CAP,CER.103K-B1H -CP
C025	08S82122F23	CAP,CER.27RJ-CH1H-CP
C026	08S82122F24	CAP,CER.30RJ-CH1H-CP
C028	08S65128F61	CAP,CER.222K-B1H -CP
C030	08S45677W54	CAP,CER 561J-CH1H-CP
C100	08S82122F61	CAP,CER.102J-CH1H-CP
C101	08S35374W01	CAP,CER 104K-B1E-CP
C102	08S82122F39	CAP,CER.121J-CH1H-CP
C103	08S65128F70	CAP,CER.123K-B1H -CP
C104	08T15399W01	CAP,CER.223K-B1H -CP
C105	08T15399W01	CAP,CER.223K-B1H -CP
C111	08S82122F61	CAP,CER.102J-CH1H-CP
C174	08S82122F65	CAP,CER.152J-CH1H-CP
C201	08T15349Y01	CAP,CER 105K-B1A -CP
C204	08S65128F70	CAP,CER.123K-B1H -CP
C206	08S35374W01	CAP,CER 104K-B1E-CP
C207	08S82122F37	CAP,CER.101J-CH1H-CP
C209	08S82122F61	CAP,CER.102J-CH1H-CP
C210	08S35374W01	CAP,CER 104K-B1E-CP
C211	08T15399W03	CAP,CER.473K-B1H -CP
C212	08S35374W01	CAP,CER 104K-B1E-CP
C220	08T15349Y01	CAP,CER 105K-B1A -CP
C231	08S45676W67	CAP,CER.332K-B1H -CP
C232	08S45676W67	CAP,CER.332K-B1H -CP
C233	08S45676W82	CAP,CER 333K-B1C -CP
C234	08S45676W82	CAP,CER 333K-B1C -CP
C280	08S45676W80	CAP,CER 223K-B1E -CP
C281	08S45676W80	CAP,CER 223K-B1E -CP
C282	08T15399W01	CAP,CER.223K-B1H -CP
C283	08T15399W01	CAP,CER.223K-B1H -CP
C284	08T15349Y01	CAP,CER 105K-B1A -CP
C285	08T15399W01	CAP,CER.223K-B1H -CP
C301	08S60102F48	CAP,CER 105K-B1E -CP
C302	08S60102F48	CAP,CER 105K-B1E -CP
C303	08S60102F48	CAP,CER 105K-B1E -CP
C304	08S60102F48	CAP,CER 105K-B1E -CP
C305	08S60102F48	CAP,CER 105K-B1E -CP
C306	08T15399W03	CAP,CER.473K-B1H -CP
C308	08T15399W03	CAP,CER.473K-B1H -CP
C310	08S60102F48	CAP,CER 105K-B1E -CP
C311	08S45677W29	CAP,CER 51RJ-CH1H-CP
C312	08S45677W29	CAP,CER 51RJ-CH1H-CP
C331	08T25628Y01	CAP,TF 334M-1C -CP
C332	08T25628Y01	CAP,TF 334M-1C -CP
C333	08T25628Y01	CAP,TF 334M-1C -CP
C334	08T25628Y01	CAP,TF 334M-1C -CP
C341	08S45677W29	CAP,CER 51RJ-CH1H-CP
C342	08S45677W29	CAP,CER 51RJ-CH1H-CP
C343	08S45677W29	CAP,CER 51RJ-CH1H-CP
C344	08S45677W29	CAP,CER 51RJ-CH1H-CP
C501	08S82122F17	CAP,CER.15RJ-CH1H-CP
C502	08S82122F15	CAP,CER.12RJ-CH1H-CP
C503	08T15399W01	CAP,CER.223K-B1H -CP
C504	08S82122F19	CAP,CER.18RJ-CH1H-CP
C505	08S82122F17	CAP,CER.15RJ-CH1H-CP
C506	08T15399W01	CAP,CER.223K-B1H -CP
C507	08S65128F69	CAP,CER.103K-B1H -CP
C508	08T15399W01	CAP,CER.223K-B1H -CP
C601	08T15399W01	CAP,CER.223K-B1H -CP
C602	08S35374W01	CAP,CER 104K-B1E-CP
C603	08S65128F61	CAP,CER.222K-B1H -CP
C604	08S45677W36	CAP,CER.101J-CH1H-CP
C605	08T15399W01	CAP,CER.223K-B1H -CP
C607	08T15399W01	CAP,CER.223K-B1H -CP
C802	08T15399W01	CAP,CER.223K-B1H -CP
C804	08S45676W80	CAP,CER 223K-B1E -CP
C805	08T15399W01	CAP,CER.223K-B1H -CP
C806	08S35374W01	CAP,CER 104K-B1E-CP
C808	08S45677W36	CAP,CER.101J-CH1H-CP
C809	08S45677W22	CAP,CER.27RJ-CH1H-CP
C811	08S60102F44	CAP,CER 474K-B1E -CP
C812	08S60102F44	CAP,CER 474K-B1E -CP
C813	08S65128F71	CAP,CER.153K-B1H -CP
C830	08T15399W01	CAP,CER.223K-B1H -CP
C831	08T55390W34	CAP,TF 274J-1H -R5
C870	08T15399W01	CAP,CER.223K-B1H -CP
C871	08T95466W01	CAP,CER 222K-B2J -CP
C874	08T95466W01	CAP,CER 222K-B2J -CP
E001	23T55521W16	CAP,AK .22R-1C -R2
E002	23T55521W16	CAP,AK .22R-1C -R2
E003	23T55521W16	CAP,AK .22R-1C -R2
E004	23S75373W13	CAP,ELY 1R0-1H -R2
E005	23S75372W04	CAP,ELY 10R-1C -R2
E006	23S75373W13	CAP,ELY 1R0-1H -R2
E007	23T55521W16	CAP,AK .22R-1C -R2
E008	23T55521W16	CAP,AK .22R-1C -R2

Symbol No.	Part No.	Description
E009	23S75372W04	CAP,ELY 10R-1C -R2
E010	23S75372W16	CAP,ELY 2R2-1H -R2
E102	23T55378W03	CAP,KMG 471-1A -R2
E103	23S75372W05	CAP,ELY 22R-1C -R2
E104	23S75372W02	CAP,ELY 101-1A -R2
E105	23T95564W12	CAP,FC 101-1C-E -E6
E141	23S75372W15	CAP,ELY 1R0-1H -R2
E142	23S75372W15	CAP,ELY 1R0-1H -R2
E201	23S75372W15	CAP,ELY 1R0-1H -R2
E202	23S75372W15	CAP,ELY 1R0-1H -R2
E203	23S75372W15	CAP,ELY 1R0-1H -R2
E204	23S75372W15	CAP,ELY 1R0-1H -R2
E207	23T55521W16	CAP,AK .22R-1C -R2
E208	23S75372W04	CAP,ELY 10R-1C -R2
E209	23S75372W17	CAP,ELY 3R3-1H -R2
E210	23S75372W17	CAP,ELY 3R3-1H -R2
E213	23S75372W04	CAP,ELY 10R-1C -R2
E214	23S75372W04	CAP,ELY 10R-1C -R2
E215	23S65134W64	CAP,ELY R47-1H(3)-E2
E216	23T55521W16	CAP,AK .22R-1C -R2
E231	23S75372W04	CAP,ELY 10R-1C -R2
E232	23S75372W05	CAP,ELY 22R-1C -R2
E234	23S75372W04	CAP,ELY 10R-1C -R2
E235	23S75372W04	CAP,ELY 10R-1C -R2
E240	23T55521W16	CAP,AK .22R-1C -R2
E280	23T55521W16	CAP,AK .22R-1C -R2
E305	23S75372W15	CAP,ELY 1R0-1H -R2
E306	23T95115W02	CAP,AD 1R0-1H -R2
E307	23T55378W06	CAP,KMG 47R-1V -R2
E308	23T75346W04	CAP,X-PRO 252-1D +
E309	23T25139Y03	CAP,PW 471-1E +
E310	23T25139Y03	CAP,PW 471-1E +
E311	23S75373W14	CAP,ELY 2R2-1H -R2
E312	23S75373W14	CAP,ELY 2R2-1H -R2
E313	23S75372W04	CAP,ELY 10R-1C -R2
E314	23T75346W03	CAP,X-PRO 332-1C +
E315	23T95564W41	CAP,FC 471-1C-G -EA
E318	23T55521W16	CAP,AK .22R-1C -R2
E319	23T55521W16	CAP,AK .22R-1C -R2
E321	23S75372W16	CAP,ELY 2R2-1H -R2
E322	23S75372W16	CAP,ELY 2R2-1H -R2
E341	23S75373W14	CAP,ELY 2R2-1H -R2
E342	23S75373W14	CAP,ELY 2R2-1H -R2
E343	23S75373W14	CAP,ELY 2R2-1H -R2
E344	23S75373W14	CAP,ELY 2R2-1H -R2
E348	23T55521W16	CAP,AK .22R-1C -R2
E349	23T55521W16	CAP,AK .22R-1C -R2
E353	23S75372W16	CAP,ELY 2R2-1H -R2
E354	23S75372W16	CAP,ELY 2R2-1H -R2

Symbol No.	Part No.	Description
E361	23T55521W16	CAP,AK .22R-1C -R2
E362	23T55521W16	CAP,AK .22R-1C -R2
E380	23T45365W05	CAP,SME 101-1E -R2
E381	23T45365W02	CAP,SME 101-1A -R2
E382	23T45365W02	CAP,SME 101-1A -R2
E501	23S75372W03	CAP,ELY 221-1A -H2
E502	23S75372W03	CAP,ELY 221-1A -H2
E503	23S75372W05	CAP,ELY 22R-1C -R2
E504	23S65134W32	CAP,ELY 22R-1C(5)-E3
E601	23T95564W08	CAP,FC 10R-1C-B -E2
E805	23S75373W06	CAP,ELY 101-1C -R2
E806	23S65134W72	CAP,ELY 3R3-1H(4)-E2
E807	23S75372W08	CAP,ELY 101-1C -H2
E808	23S75372W05	CAP,ELY 22R-1C -R2
E809	23S75372W08	CAP,ELY 101-1C -H2
E811	23S75372W04	CAP,ELY 10R-1C -R2
E812	23S75372W07	CAP,ELY 47R-1C -R2
E813	23T45365W05	CAP,SME 101-1E -R2
E814	23T45365W02	CAP,SME 101-1A -R2
E815	23T45365W06	CAP,SME 33R-1V -R2
E818	23S65134W31	CAP,ELY 10R-1C(4)-E2
E821	23S75372W04	CAP,ELY 10R-1C -R2
E822	23T55521W16	CAP,AK .22R-1C -R2
E823	23S65134W31	CAP,ELY 10R-1C(4)-E2
E870	23T45365W03	CAP,SME 221-1A -R2
E871	23T45365W03	CAP,SME 221-1A -R2

Resistors

L502	06T75432W50	RES,RK JUMPER1/10-CP
R001	06T75433W01	RES,RK 10RJ 1/4 -CP
R003	06T75431W57	RES,RK 821J 1/10 -CP
R010	06T75431W97	RES,RK 393J 1/10 -CP
R011	06T25277Y87	RES,RK 183J 1/16 -CP
R012	06T75432W40	RES,RK 225J 1/10 -CP
R014	06T75431W99	RES,RK 473J 1/10 -CP
R015	06T75431W99	RES,RK 473J 1/10 -CP
R016	06T25277Y57	RES,RK 102J 1/16 -CP
R017	06T25277Y57	RES,RK 102J 1/16 -CP
R018	06T25279Y04	RES,RK JUMPER1/16-CP
R019	06T75431W83	RES,RK 103J 1/10 -CP
R022	06T75431W91	RES,RK 223J 1/10 -CP
R025	06T75431W77	RES,RK 562J 1/10 -CP
R026	06T25277Y81	RES,RK 103J 1/16 -CP
R027	06T25277Y93	RES,RK 333J 1/16 -CP
R029	06T75431W93	RES,RK 273J 1/10 -CP
R030	06T75434W26	RES,RK JUMPER 1/4-CP
R031	06T75434W26	RES,RK JUMPER 1/4-CP

Symbol No.	Part No.	Description
R032	06T75432W50	RES,RK JUMPER1/10-CP
R033	06T75432W50	RES,RK JUMPER1/10-CP
R034	06T25277Y57	RES,RK 102J 1/16 -CP
R035	06T75432W50	RES,RK JUMPER1/10-CP
R036	06T25277Y43	RES,RK 271J 1/16 -CP
R037	06T25277Y43	RES,RK 271J 1/16 -CP
R038	06T25277Y57	RES,RK 102J 1/16 -CP
R040	06T75431W67	RES,RK 222J 1/10 -CP
R041	06T25278Y22	RES,RK 474J 1/16 -CP
R042	06T75431W59	RES,RK 102J 1/10 -CP
R101	06T75431W92	RES,RK 243J 1/10 -CP
R102	06T75431W71	RES,RK 332J 1/10 -CP
R111	06T75434W22	RES,RK 2R2J 1/4 -CP
R112	06T75434W22	RES,RK 2R2J 1/4 -CP
R113	06T75433W74	RES,RK 113J 1/4 -CP
R114	06T75433W51	RES,RK 122J 1/4 -CP
R115	06T75432W27	RES,RK 624J 1/10 -CP
R143	06T75434W26	RES,RK JUMPER 1/4-CP
R144	06T75434W26	RES,RK JUMPER 1/4-CP
R170	06T75433W25	RES,RK 101J 1/4 -CP
R171	06T75433W43	RES,RK 561J 1/4 -CP
R172	06T75433W43	RES,RK 561J 1/4 -CP
R173	06S35084Y33	RES,RK 472F 1/8 -CP
R174	06S35084Y41	RES,RK 223F 1/8 -CP
R175	06T75432W25	RES,RK 514J 1/10 -CP
R201	06T75431W92	RES,RK 243J 1/10 -CP
R202	06T25277Y57	RES,RK 102J 1/16 -CP
R203	06T75431W97	RES,RK 393J 1/10 -CP
R204	06T75432W08	RES,RK 104J 1/10 -CP
R206	06T75432W24	RES,RK 474J 1/10 -CP
R207	06T25277Y57	RES,RK 102J 1/16 -CP
R208	06T25277Y57	RES,RK 102J 1/16 -CP
R209	06T75431W99	RES,RK 473J 1/10 -CP
R210	06T75431W99	RES,RK 473J 1/10 -CP
R215	06T75431W79	RES,RK 682J 1/10 -CP
R220	06T25277Y81	RES,RK 103J 1/16 -CP
R222	06T75431W60	RES,RK 112J 1/10 -CP
R223	06T25277Y58	RES,RK 112J 1/16 -CP
R224	06T25277Y58	RES,RK 112J 1/16 -CP
R225	06T75431W60	RES,RK 112J 1/10 -CP
R231	06T75431W90	RES,RK 203J 1/10 -CP
R232	06T75431W90	RES,RK 203J 1/10 -CP
R233	06T75431W90	RES,RK 203J 1/10 -CP
R234	06T75431W90	RES,RK 203J 1/10 -CP
R235	06T75431W83	RES,RK 103J 1/10 -CP
R236	06T75431W83	RES,RK 103J 1/10 -CP
R237	06T75431W83	RES,RK 103J 1/10 -CP
R256	06T25277Y89	RES,RK 223J 1/16 -CP
R257	06T75431W99	RES,RK 473J 1/10 -CP

Symbol No.	Part No.	Description
R280	06T75431W59	RES,RK 102J 1/10 -CP
R281	06T25278Y11	RES,RK 164J 1/16 -CP
R282	06T75432W18	RES,RK 274J 1/10 -CP
R284	06T75432W50	RES,RK JUMPER1/10-CP
R301	06T75431W83	RES,RK 103J 1/10 -CP
R302	06T75433W90	RES,RK 513J 1/4 -CP
R304	06T75434W17	RES,RK 624J 1/4 -CP
R311	06T25278Y06	RES,RK 104J 1/16 -CP
R312	06T25278Y06	RES,RK 104J 1/16 -CP
R313	06T25277Y80	RES RK 912J 1/16 -CP
R314	06T25277Y80	RES RK 912J 1/16 -CP
R315	06T25277Y85	RES,RK 153J 1/16 -CP
R316	06T25277Y85	RES,RK 153J 1/16 -CP
R321	06T25277Y96	RES,RK 433J 1/16 -CP
R322	06T25277Y96	RES,RK 433J 1/16 -CP
R323	06T75431W43	RES,RK 221J 1/10 -CP
R324	06T75431W43	RES,RK 221J 1/10 -CP
R325	06T75431W35	RES,RK 101J 1/10 -CP
R326	06T75431W35	RES,RK 101J 1/10 -CP
R339	06T75432W17	RES,RK 244J 1/10 -CP
R340	06T75431W59	RES,RK 102J 1/10 -CP
R341	06T75432W08	RES,RK 104J 1/10 -CP
R342	06T75432W08	RES,RK 104J 1/10 -CP
R343	06T25277Y80	RES RK 912J 1/16 -CP
R344	06T25277Y80	RES RK 912J 1/16 -CP
R345	06T25277Y85	RES,RK 153J 1/16 -CP
R346	06T25277Y85	RES,RK 153J 1/16 -CP
R347	06T25277Y80	RES RK 912J 1/16 -CP
R348	06T25277Y80	RES RK 912J 1/16 -CP
R349	06T25277Y85	RES,RK 153J 1/16 -CP
R350	06T25277Y85	RES,RK 153J 1/16 -CP
R361	06T75432W08	RES,RK 104J 1/10 -CP
R362	06T75432W08	RES,RK 104J 1/10 -CP
R363	06T25277Y96	RES,RK 433J 1/16 -CP
R364	06T25277Y96	RES,RK 433J 1/16 -CP
R365	06T75431W43	RES,RK 221J 1/10 -CP
R367	06T75431W35	RES,RK 101J 1/10 -CP
R368	06T75431W43	RES,RK 221J 1/10 -CP
R370	06T75431W35	RES,RK 101J 1/10 -CP
R380	06T75434W19	RES,RK 754J 1/4 -CP
R381	06T75432W25	RES,RK 514J 1/10 -CP
R382	06T75432W25	RES,RK 514J 1/10 -CP
R385	06T25277Y41	RES,RK 221J 1/16 -CP
R386	06T25277Y41	RES,RK 221J 1/16 -CP
R389	06T25277Y41	RES,RK 221J 1/16 -CP
R390	06T25277Y41	RES,RK 221J 1/16 -CP
R500	06T75431W59	RES,RK 102J 1/10 -CP
R501	06T75431W59	RES,RK 102J 1/10 -CP
R502	06T75431W59	RES,RK 102J 1/10 -CP

Symbol No.	Part No.	Description
R503	06T75431W59	RES,RK 102J 1/10 -CP
R504	06T75431W59	RES,RK 102J 1/10 -CP
R505	06T75431W59	RES,RK 102J 1/10 -CP
R506	06T75431W59	RES,RK 102J 1/10 -CP
R507	06T75431W59	RES,RK 102J 1/10 -CP
R509	06T75432W29	RES,RK 754J 1/10 -CP
R510	06S35084Y27	RES,RK 152F 1/8 -CP
R511	06T75431W59	RES,RK 102J 1/10 -CP
R512	06T25277Y57	RES,RK 102J 1/16 -CP
R513	06T25277Y81	RES,RK 103J 1/16 -CP
R514	06T25277Y57	RES,RK 102J 1/16 -CP
R515	06T75431W59	RES,RK 102J 1/10 -CP
R516	06T25277Y57	RES,RK 102J 1/16 -CP
R517	06T25277Y57	RES,RK 102J 1/16 -CP
R518	06T25277Y83	RES,RK 123J 1/16 -CP
R520	06T25278Y06	RES,RK 104J 1/16 -CP
R521	06T75432W50	RES,RK JUMPER1/10-CP
R522	06T75431W59	RES,RK 102J 1/10 -CP
R523	06T75431W59	RES,RK 102J 1/10 -CP
R524	06T75431W59	RES,RK 102J 1/10 -CP
R525	06T75434W14	RES,RK 474J 1/4 -CP
R526	06S15593Y55	RES,RK 182F 1/10 -CP
R529	06T75431W99	RES,RK 473J 1/10 -CP
R530	06T25277Y97	RES,RK 473J 1/16 -CP
R531	06T75432W50	RES,RK JUMPER1/10-CP
R532	06T75432W50	RES,RK JUMPER1/10-CP
R533	06T75431W59	RES,RK 102J 1/10 -CP
R534	06T75431W59	RES,RK 102J 1/10 -CP
R535	06T75431W59	RES,RK 102J 1/10 -CP
R536	06T75431W83	RES,RK 103J 1/10 -CP
R537	06T75431W83	RES,RK 103J 1/10 -CP
R541	06T75431W59	RES,RK 102J 1/10 -CP
R542	06T75431W79	RES,RK 682J 1/10 -CP
R543	06T75431W83	RES,RK 103J 1/10 -CP
R544	06T75431W91	RES,RK 223J 1/10 -CP
R549	06T75431W59	RES,RK 102J 1/10 -CP
R550	06T75431W91	RES,RK 223J 1/10 -CP
R551	06T75431W75	RES,RK 472J 1/10 -CP
R552	06T25277Y57	RES,RK 102J 1/16 -CP
R553	06T75431W91	RES,RK 223J 1/10 -CP
R554	06T25277Y81	RES,RK 103J 1/16 -CP
R555	06T25277Y81	RES,RK 103J 1/16 -CP
R559	06T25277Y81	RES,RK 103J 1/16 -CP
R560	06T25277Y89	RES,RK 223J 1/16 -CP
R561	06T75433W33	RES,RK 221J 1/4 -CP
R562	06T75431W91	RES,RK 223J 1/10 -CP
R563	06T75431W91	RES,RK 223J 1/10 -CP
R571	06T75431W59	RES,RK 102J 1/10 -CP
R572	06T75431W59	RES,RK 102J 1/10 -CP

Symbol No.	Part No.	Description
R573	06T25277Y57	RES,RK 102J 1/16 -CP
R577	06T75431W75	RES,RK 472J 1/10 -CP
R580	06T75432W08	RES,RK 104J 1/10 -CP
R581	06T25277Y57	RES,RK 102J 1/16 -CP
R582	06T75431W59	RES,RK 102J 1/10 -CP
R590	06T25279Y04	RES,RK JUMPER1/16-CP
R591	06T25279Y04	RES,RK JUMPER1/16-CP
R592	06T75431W59	RES,RK 102J 1/10 -CP
R599	06T25277Y97	RES,RK 473J 1/16 -CP
R601	06T75433W73	RES,RK 103J 1/4 -CP
R602	06T75431W99	RES,RK 473J 1/10 -CP
R603	06T75433W73	RES,RK 103J 1/4 -CP
R604	06T25277Y81	RES,RK 103J 1/16 -CP
R605	06T75433W49	RES,RK 102J 1/4 -CP
R606	06T75431W83	RES,RK 103J 1/10 -CP
R607	06T75431W35	RES,RK 101J 1/10 -CP
R608	06T25277Y65	RES,RK 222J 1/16 -CP
R609	06T25277Y69	RES,RK 332J 1/16 -CP
R610	06T25277Y81	RES,RK 103J 1/16 -CP
R611	06T25277Y89	RES,RK 223J 1/16 -CP
R612	06T25277Y57	RES,RK 102J 1/16 -CP
R613	06T75433W13	RES,RK 33RJ 1/4 -CP
R614	06T75433W13	RES,RK 33RJ 1/4 -CP
R615	06T75433W13	RES,RK 33RJ 1/4 -CP
R616	06T75433W13	RES,RK 33RJ 1/4 -CP
R617	06T75433W13	RES,RK 33RJ 1/4 -CP
R618	06T75433W13	RES,RK 33RJ 1/4 -CP
R619	06T25277Y97	RES,RK 473J 1/16 -CP
R620	06T25277Y97	RES,RK 473J 1/16 -CP
R621	06T25277Y89	RES,RK 223J 1/16 -CP
R622	06T75431W91	RES,RK 223J 1/10 -CP
R623	06T75431W91	RES,RK 223J 1/10 -CP
R655	06T75433W37	RES,RK 331J 1/4 -CP
R801	06T75433W82	RES,RK 243J 1/4 -CP
R802	06T25590Y02	RES,RS 561J 1W -
R804	06T75432W20	RES,RK 334J 1/10 -CP
R806	06T75433W65	RES,RK 472J 1/4 -CP
R807	06T75433W65	RES,RK 472J 1/4 -CP
R808	06T25277Y57	RES,RK 102J 1/16 -CP
R809	06T75433W73	RES,RK 103J 1/4 -CP
R811	06T75431W59	RES,RK 102J 1/10 -CP
R812	06T25277Y99	RES,RK 563J 1/16 -CP
R813	06T75433W31	RES,RK 181J 1/4 -CP
R814	06T75434W23	RES,RK 5R6J 1/4 -CP
R815	06T75433W33	RES,RK 221J 1/4 -CP
R816	06T25278Y22	RES,RK 474J 1/16 -CP
R817	06T75434W22	RES,RK 2R2J 1/4 -CP
R818	06T75434W22	RES,RK 2R2J 1/4 -CP
R819	06T75433W47	RES,RK 821J 1/4 -CP

Symbol No.	Part No.	Description
R821	06T25279Y04	RES,RK JUMPER1/16-CP
R824	06T75433W54	RES,RK 162J 1/4 -CP
R826	06T75431W99	RES,RK 473J 1/10 -CP
R830	06T25277Y57	RES,RK 102J 1/16 -CP
R831	06T25277Y69	RES,RK 332J 1/16 -CP
R832	06T75433W49	RES,RK 102J 1/4 -CP
R833	06T75433W73	RES,RK 103J 1/4 -CP
R837	06T75431W92	RES,RK 243J 1/10 -CP
R838	06T75433W55	RES,RK 182J 1/4 -CP
R839	06T75433W55	RES,RK 182J 1/4 -CP
R840	06T25590Y03	RES,RS 2R2J 1W -
R847	06T75431W83	RES,RK 103J 1/10 -CP
R850	06T25277Y61	RES,RK 152J 1/16 -CP
R851	06T25277Y65	RES,RK 222J 1/16 -CP
R853	06T25277Y65	RES,RK 222J 1/16 -CP
R854	06T25277Y61	RES,RK 152J 1/16 -CP
R855	06T75433W01	RES,RK 10RJ 1/4 -CP
R856	06T75433W15	RES,RK 39RJ 1/4 -CP
R857	06T75433W15	RES,RK 39RJ 1/4 -CP
R858	06T75433W15	RES,RK 39RJ 1/4 -CP
R859	06T75433W15	RES,RK 39RJ 1/4 -CP
R860	06T25277Y59	RES,RK 122J 1/16 -CP
R861	06T25277Y73	RES,RK 472J 1/16 -CP
R862	06T25277Y77	RES,RK 682J 1/16 -CP
R863	06T25277Y81	RES,RK 103J 1/16 -CP
R864	06T25277Y81	RES,RK 103J 1/16 -CP
R865	06T25277Y81	RES,RK 103J 1/16 -CP
R866	06T25277Y81	RES,RK 103J 1/16 -CP
R867	06T25277Y77	RES,RK 682J 1/16 -CP
R868	06T25277Y81	RES,RK 103J 1/16 -CP
R869	06T75433W33	RES,RK 221J 1/4 -CP
R870	06T25277Y85	RES,RK 153J 1/16 -CP
R872	06T75433W35	RES,RK 271J 1/4 -CP
R873	06T75433W35	RES,RK 271J 1/4 -CP
R875	06T75433W41	RES,RK 471J 1/4 -CP
R876	06S35084Y28	RES,RK 182F 1/8 -CP
R877	06S35084Y34	RES,RK 562F 1/8 -CP
R878	06T75431W99	RES,RK 473J 1/10 -CP
R879	06T75431W83	RES,RK 103J 1/10 -CP
R881	06T75434W23	RES,RK 5R6J 1/4 -CP
R882	06T75431W83	RES,RK 103J 1/10 -CP
R889	06T75432W50	RES,RK JUMPER1/10-CP
RA506	06S45591W06	RES,ARY MNR102J 4-CP
RA507	06S45591W06	RES,ARY MNR102J 4-CP
RA508	06S45591W06	RES,ARY MNR102J 4-CP
RA510	06S45591W06	RES,ARY MNR102J 4-CP
RA511	06S45591W06	RES,ARY MNR102J 4-CP

Symbol No.	Part No.	Description
Connectors		
CB301	09T25436Y07	WTB,53253-0710 -DB
CB330	09T25436Y03	WTB,53253-0310 -DB
CB331	09T25436Y03	WTB,53253-0310 -DB
CB501	09T45434W15	FFC,52271-1590 -ED
CB601	09T25436Y02	WTB,53253-0210 -DB
CB802	09T25436Y05	WTB,53253-0510 -DB
CB803	09T25436Y03	WTB,53253-0310 -DB
CH101	09T25684Y22	FFC,SLW22R-1C7 -DB
Front P.W.Board		
IC's		
IC401	51T85152W01	LC75883 -QT
IC402	51T15186Y01	LC75823W -QT
IC403	51T25419Y01	RS-181 -NE6
Transistors		
Q405	48T63788F04	TR ,CP.2SD1328-T -TX
Q406	48T63788F04	TR ,CP.2SD1328-T -TX
Q408	48T64222F02	TR ,UN2212 22-22 -TX
Q409	48T64222F01	TR ,UN2211 10-10 -TX
Q410	48T64222F01	TR ,UN2211 10-10 -TX
Diodes		
D401	48T81063F01	DIO,CP.MA159 / TX-CP
D402	48T94471F01	TR , IMN10
D405	48T85357W01	DIO,1PS226 -CP
D406	48T85357W01	DIO,1PS226 -CP
D407	48T85357W01	DIO,1PS226 -CP
D408	48T85357W01	DIO,1PS226 -CP
D409	48T85357W01	DIO,1PS226 -CP
LED's		
LD416	48T25583Y01	LED,BLU KB1111CE -CP
LD417	48T25534Y02	LED,RED BR1111C -CP
LD418	48T25534Y06	LED,YEL PY1111C -CP
LD419	48T25534Y03	LED,AMB AA1111C -CP
LD420	48T25534Y03	LED,AMB AA1111C -CP
LD421	48T25534Y03	LED,AMB AA1111C -CP

Symbol No.	Part No.	Description
LD422	48T25534Y03	LED,AMB AA1111C -CP
LD423	48T25534Y03	LED,AMB AA1111C -CP
LD424	48T25534Y03	LED,AMB AA1111C -CP
LD425	48T25534Y03	LED,AMB AA1111C -CP
LD426	48T25534Y03	LED,AMB AA1111C -CP
LD427	48T25534Y03	LED,AMB AA1111C -CP
LD428	48T25534Y03	LED,AMB AA1111C -CP
LD429	48T25534Y03	LED,AMB AA1111C -CP
LD430	48T25534Y03	LED,AMB AA1111C -CP
LD431	48T25534Y03	LED,AMB AA1111C -CP
LD432	48T25534Y03	LED,AMB AA1111C -CP
LD433	48T25534Y03	LED,AMB AA1111C -CP
LD434	48T25534Y01	LED,GRN BG1111C -CP
LD435	48T25534Y01	LED,GRN BG1111C -CP
LD436	48T25534Y01	LED,GRN BG1111C -CP
LD437	48T25534Y01	LED,GRN BG1111C -CP
LD438	48T25534Y01	LED,GRN BG1111C -CP
LD439	48T25534Y01	LED,GRN BG1111C -CP
LD440	48T25534Y01	LED,GRN BG1111C -CP
LD441	48T25534Y01	LED,GRN BG1111C -CP
LD450	48T65477W03	LED,SML-010PTT87 -CP(GRN)
LD451	48T65477W03	LED,SML-010PTT87 -CP(GRN)
LD452	48T65477W03	LED,SML-010PTT87 -CP(GRN)
LD453	48T65477W03	LED,SML-010PTT87 -CP(GRN)
LD454	48T65477W03	LED,SML-010PTT87 -CP(GRN)
LD455	48T65477W03	LED,SML-010PTT87 -CP(GRN)
LD456	48T65477W03	LED,SML-010PTT87 -CP(GRN)
LD457	48T15110Y02	LED,A/G AABG1211C-CP
LD458	48T25534Y08	LED,AMB FA1111C -CP
LD470	48T15110Y02	LED,A/G AABG1211C-CP
LD471	48T15110Y02	LED,A/G AABG1211C-CP
LD472	48T15110Y02	LED,A/G AABG1211C-CP
LD473	48T15110Y02	LED,A/G AABG1211C-CP
LD474	48T15110Y02	LED,A/G AABG1211C-CP
LD475	48T15110Y02	LED,A/G AABG1211C-CP
LD476	48T15110Y02	LED,A/G AABG1211C-CP
LD477	48T15110Y02	LED,A/G AABG1211C-CP
LD478	48T15110Y02	LED,A/G AABG1211C-CP
LD479	48T15110Y02	LED,A/G AABG1211C-CP
LD480	48T15110Y02	LED,A/G AABG1211C-CP
LD481	48T15110Y02	LED,A/G AABG1211C-CP

Switches

Symbol No.	Part No.	Description
SW402	40T55656W06	SW,TACT SKQMAJ001-E2(AF)
SW403	40T55656W06	SW,TACT SKQMAJ001-E2(FWD/UP)
SW404	40T55656W06	SW,TACT SKQMAJ001-E2 (PLAY/PAUSE/TUNE/A.ME)
SW405	40T55656W06	SW,TACT SKQMAJ001-E2(DN/BWD)
SW407	40T55656W06	SW,TACT SKQMAJ001-E2(PWR/SOURCE)
SW408	40T55656W06	SW,TACT SKQMAJ001-E2(T.S.M./BAND)
SW409	40T55656W06	SW,TACT SKQMAJ001-E2(BBE/T.INFO)
SW410	40T55656W06	SW,TACT SKQMAJ001-E2(DISP/INTLZ)
SW411	40T55656W06	SW,TACT SKQMAJ001-E2(TITLE)
SW412	40T55656W06	SW,TACT SKQMAJ001-E2(F/A.PROC)
SW413	40T55656W06	SW,TACT SKQMAJ001-E2(1/R.TEXT)
SW414	40T55656W06	SW,TACT SKQMAJ001-E2(2/PTY)
SW415	40T55656W06	SW,TACT SKQMAJ001-E2(3/P.PTY)
SW416	40T55656W06	SW,TACT SKQMAJ001-E2(4/M.I.X.)
SW417	40T55656W06	SW,TACT SKQMAJ001-E2(5/RPT)
SW418	40T55656W06	SW,TACT SKQMAJ001-E2(6/SCAN)
SW419	40T55656W06	SW,TACT SKQMAJ001-E2(EJECT)
SW420	40T55656W06	SW,TACT SKQMAJ001-E2(ANGLE UP)
SW421	40T55656W06	SW,TACT SKQMAJ001-E2(ANGLE DOWN)
SW424	40T55656W06	SW,TACT SKQMAJ001-E2(RESET)

Inverter

Symbol No.	Part No.	Description
CB401	01T95281W08	ASSY,INV 7852R0

Capacitors

Symbol No.	Part No.	Description
C401	08S53332F62	CAP,CP .473-K-B -CP
C402	08S82122F61	CAP,CER.102J-CH1H-CP
C403	08T15399W03	CAP,CER.473K-B1H -CP
C404	08T15399W03	CAP,CER.473K-B1H -CP
C405	08S53332F62	CAP,CP .473-K-B -CP
C406	08T15399W03	CAP,CER.473K-B1H -CP
C407	08T15399W03	CAP,CER.473K-B1H -CP
C408	08S82122F57	CAP,CER.681J-CH1H-CP
C409	08S35374W01	CAP,CER 104K-B1E-CP
C410	08S82122F61	CAP,CER.102J-CH1H-CP
C411	08S82122F61	CAP,CER.102J-CH1H-CP
C412	08S82122F61	CAP,CER.102J-CH1H-CP
C413	08S82122F49	CAP,CER.331J-CH1H-CP
C414	08S82122F49	CAP,CER.331J-CH1H-CP
E402	23S55311W42	CAP,TAN.4R7-1D-B -CP

Resistors

Symbol No.	Part No.	Description
R400	06T75433W75	RES,RK 123J 1/4 -CP
R401	06T75431W59	RES,RK 102J 1/10 -CP
R402	06T75431W59	RES,RK 102J 1/10 -CP
R403	06T75431W59	RES,RK 102J 1/10 -CP
R404	06T75431W59	RES,RK 102J 1/10 -CP

Symbol No.	Part No.	Description
R405	06T75431W47	RES,RK 331J 1/10 -CP
R406	06T75431W59	RES,RK 102J 1/10 -CP
R407	06T75431W59	RES,RK 102J 1/10 -CP
R408	06T75434W22	RES,RK 2R2J 1/4 -CP
R418	06T75431W98	RES,RK 433J 1/10 -CP
R423	06T75431W59	RES,RK 102J 1/10 -CP
R424	06T75431W98	RES,RK 433J 1/10 -CP
R428	06T75431W59	RES,RK 102J 1/10 -CP
R429	06T75431W59	RES,RK 102J 1/10 -CP
R430	06T75431W59	RES,RK 102J 1/10 -CP
R431	06T75431W59	RES,RK 102J 1/10 -CP
R432	06T75431W59	RES,RK 102J 1/10 -CP
R433	06T75431W59	RES,RK 102J 1/10 -CP
R434	06T75431W59	RES,RK 102J 1/10 -CP
R435	06T75431W59	RES,RK 102J 1/10 -CP
R436	06T75431W59	RES,RK 102J 1/10 -CP
R437	06T75431W59	RES,RK 102J 1/10 -CP
R438	06T75433W28	RES,RK 131J 1/4 -CP
R439	06T75433W29	RES,RK 151J 1/4 -CP
R440	06T75433W28	RES,RK 131J 1/4 -CP
R441	06T75433W29	RES,RK 151J 1/4 -CP
R442	06T75433W29	RES,RK 151J 1/4 -CP
R443	06T75433W28	RES,RK 131J 1/4 -CP
R444	06T75433W29	RES,RK 151J 1/4 -CP
R445	06T75433W28	RES,RK 131J 1/4 -CP
R448	06T75433W59	RES,RK 272J 1/4 -CP
R449	06T75433W44	RES,RK 621J 1/4 -CP
R451	06T75431W67	RES,RK 222J 1/10 -CP
R455	06T75431W67	RES,RK 222J 1/10 -CP
R456	06T75433W52	RES,RK 132J 1/4 -CP
R458	06T75431W35	RES,RK 101J 1/10 -CP
R459	06T75431W75	RES,RK 472J 1/10 -CP
R464	06T75432W08	RES,RK 104J 1/10 -CP
R465	06T75433W44	RES,RK 621J 1/4 -CP
R470	06T75431W83	RES,RK 103J 1/10 -CP
R471	06T75433W38	RES,RK 361J 1/4 -CP
R472	06T75433W31	RES,RK 181J 1/4 -CP
R473	06T75433W38	RES,RK 361J 1/4 -CP
R474	06T75433W31	RES,RK 181J 1/4 -CP
R475	06T75433W38	RES,RK 361J 1/4 -CP
R476	06T75433W31	RES,RK 181J 1/4 -CP
RA401	06S45591W06	RES,ARY MNR102J 4-CP
RA402	06S45591W06	RES,ARY MNR102J 4-CP

Symbol No.	Part No.	Description

DC/DC Converter P.W.Board

IC's

Symbol No.	Part No.	Description
IC901	51T80251F01	NJM78L09A -NB
IC902	51T80252F01	NJM79L09A -NB

Transistors

Symbol No.	Part No.	Description
Q901	48T69176F02	TR ,2SC3421-Y
Q902	48T55057W01	TR,2SD1857-PQ-TV2-RD
Q903	48T55057W01	TR,2SD1857-PQ-TV2-RD

Diodes

Symbol No.	Part No.	Description
D901	48T85269W02	DIO,SHT SB040 -H5
D902	48T85269W02	DIO,SHT SB040 -H5
D903	48T85269W02	DIO,SHT SB040 -H5
D904	48T85269W02	DIO,SHT SB040 -H5
ZD901	48T25766W25	DIO,ZEN.HZS 9C2L -R5

Coil

Symbol No.	Part No.	Description
L901	24T95399W21	IND,RCH-855 471K +

Transfomer

Symbol No.	Part No.	Description
T901	25T95401W01	TRANS,LC-10 -DB

Capacitors

Symbol No.	Part No.	Description
C902	08T55390W22	CAP,TF 273J-1H -R5
E901	23T45365W05	CAP,SME 101-1E -R2
E902	23T45365W06	CAP,SME 33R-1V -R2
E903	23T45365W02	CAP,SME 101-1A -R2
E904	23T45365W05	CAP,SME 101-1E -R2
E905	23T45365W05	CAP,SME 101-1E -R2
E906	23T45365W02	CAP,SME 101-1A -R2
E907	23T45365W02	CAP,SME 101-1A -R2

Resistors

Symbol No.	Part No.	Description
R901	06T75433W33	RES,RK 221J 1/4 -CP
R902	06T75434W17	RES,RK 624J 1/4 -CP
R903	06T75432W30	RES,RK 824J 1/10 -CP

Symbol No.	Part No.	Description
R918	06T75433W69	RES,RK 682J 1/4 -CP
R919	06T75432W27	RES,RK 624J 1/10 -CP
R920	06T75432W27	RES,RK 624J 1/10 -CP
Connector		
CB911	09T25436Y08	WTB,53253-0810 -DB
DP-S Main P.W.Board		
IC's		
IC101	51T25729Y03	MN662771AA5 -QT
IC102	51T35372Y01	AN8882SB-E1 -SEA
IC103	51T25503Y01	BA5985FM-E2 -SEA
IC104	51T35130Y01	TC74HC08AF-EL -SE6
IC201	51T11054W02	NJM78L05UA-TE1 -NE2
IC203	51T16025W01	IC,NJM2100M-TE3-SE03
Transistors		
Q101	48T80611F01	CP.2SB1132-QR-101-E3
Q102	48T73888F08	TR ,CP.FMG1-99
Q103	48T73888F08	TR ,CP.FMG1-99
Q105	48T73888F12	TR ,CP.FMC2-99
Q106	48T94875F06	DTB,CP-113ZK-96
Q107	48T94606F03	TR,DTC124EUA-T106-CP
Diode		
D101	48T81063F01	DIO,CP.MA159 / TX-CP
Crystals		
CL101	91T75576W08	OSC,CER EFOJM1695-E2
CL102	91T75576W01	OSC,CER EFOS4194E-E5
Thermistor		
TH101	48T25250Y01	TMT,ERTJ1VV104J -CP

Symbol No.	Part No.	Description
Capacitors		
C101	08S65128F78	CAP,CER.223K-B1H -CP
C102	08S65128F90	CAP,CER 473K-B1H -CP
C104	08S65128F78	CAP,CER.223K-B1H -CP
C105	08S65128F64	CAP,CER.392K-B1H -CP
C106	08T15349Y01	CAP,CER 105K-B1A -CP
C108	08S65128F79	CAP,CER.273K-B1H -CP
C109	08S65128F79	CAP,CER.273K-B1H -CP
C110	08S65128F68	CAP,CER.822K-B1H -CP
C111	08S65128F61	CAP,CER.222K-B1H -CP
C112	08S12453W04	CAP,CER 331G-CH1H-CP
C114	08S65128F67	CAP,CER.682K-B1H -CP
C115	08S65128F78	CAP,CER.223K-B1H -CP
C120	08S82122F55	CAP,CER.561J-CH1H-CP
C121	08S35374W01	CAP,CER 104K-B1E-CP
C122	08S82122F42	CAP,CER.161J-CH1H-CP
C123	08S82122F33	CAP,CER.68RJ-CH1H-CP
C124	08S65128F78	CAP,CER.223K-B1H -CP
C125	08S65128F66	CAP,CER.562K-B1H -CP
C126	08S35374W01	CAP,CER 104K-B1E-CP
C127	08S35374W01	CAP,CER 104K-B1E-CP
C129	08S65128F60	CAP,CER.182K-B1H -CP
C131	08S82122F37	CAP,CER.101J-CH1H-CP
C133	08S35374W01	CAP,CER 104K-B1E-CP
C134	08S65128F78	CAP,CER.223K-B1H -CP
C135	08S65128F78	CAP,CER.223K-B1H -CP
C136	08S65128F78	CAP,CER.223K-B1H -CP
C137	08S35374W01	CAP,CER 104K-B1E-CP
C138	08T55487W02	CAP,CER.224K-B1C -CP
C139	08S65128F78	CAP,CER.223K-B1H -CP
C140	08S65128F78	CAP,CER.223K-B1H -CP
C141	08S35374W01	CAP,CER 104K-B1E-CP
C146	08S35374W01	CAP,CER 104K-B1E-CP
C147	08S65128F78	CAP,CER.223K-B1H -CP
C148	08S65128F57	CAP,CER.102K-B1H -CP
C149	08S65128F41	CAP,CER.181J-SL1H-CP
C150	08S65128F59	CAP,CER.152K-B1H -CP
C151	08S65128F69	CAP,CER.103K-B1H -CP
C153	08S35374W01	CAP,CER 104K-B1E-CP
C201	08S82122F59	CAP,CER.821J-CH1H-CP
C202	08S82122F59	CAP,CER.821J-CH1H-CP
C203	08S82122F47	CAP,CER.271J-CH1H-CP
C204	08S82122F47	CAP,CER.271J-CH1H-CP
C207	08S82122F41	CAP,CER.151J-CH1H-CP
C208	08S82122F41	CAP,CER.151J-CH1H-CP
E101	23S55311W35	CAP,TAN 10R-1C-B -CP
E102	23T85373W03	CAP,ECAR 47R-05-C-E5
E103	23T85373W03	CAP,ECAR 47R-05-C-E5

Symbol No.	Part No.	Description
E104	23T85373W06	CAP,RA 4R7-1V-B -E5
E106	23T85373W05	CAP,ECAR 10R-1C-C-E5
E107	23S55311W35	CAP,TAN 10R-1C-B -CP
E108	23S55311W35	CAP,TAN 10R-1C-B -CP
E110	23S55311W35	CAP,TAN 10R-1C-B -CP
E111	23T85373W03	CAP,ECAR 47R-05-C-E5
E112	23T85373W04	CAP,RA 22R-0J-B -E5
E113	23T85373W05	CAP,ECAR 10R-1C-C-E5
E201	23T85373W04	CAP,RA 22R-0J-B -E5
E202	23T85373W04	CAP,RA 22R-0J-B -E5
E203	23T85373W04	CAP,RA 22R-0J-B -E5
Resistors		
R101	06T25277Y82	RES,RK 113J 1/16 -CP
R102	06T25279Y04	RES,RK JUMPER1/16-CP
R103	06T25279Y04	RES,RK JUMPER1/16-CP
R104	06T25277Y82	RES,RK 113J 1/16 -CP
R105	06T75433W01	RES,RK 10RJ 1/4 -CP
R106	06T25277Y97	RES,RK 473J 1/16 -CP
R107	06T75433W03	RES,RK 12RJ 1/4 -CP
R108	06T25277Y93	RES,RK 333J 1/16 -CP
R109	06T25277Y97	RES,RK 473J 1/16 -CP
R110	06T25277Y99	RES,RK 563J 1/16 -CP
R111	06T25279Y04	RES,RK JUMPER1/16-CP
R112	06T25277Y81	RES,RK 103J 1/16 -CP
R113	06T25277Y99	RES,RK 563J 1/16 -CP
R114	06T25278Y14	RES,RK 224J 1/16 -CP
R115	06T25278Y15	RES,RK 244J 1/16 -CP
R116	06T25277Y97	RES,RK 473J 1/16 -CP
R120	06T25277Y74	RES,RK 512J 1/16 -CP
R121	06T25277Y88	RES,RK 203J 1/16 -CP
R122	06T25277Y81	RES,RK 103J 1/16 -CP
R123	06T25277Y87	RES,RK 183J 1/16 -CP
R124	06T25277Y33	RES,RK 101J 1/16 -CP
R125	06T25277Y97	RES,RK 473J 1/16 -CP
R126	06T25277Y92	RES,RK 303J 1/16 -CP
R127	06T25277Y98	RES,RK 513J 1/16 -CP
R128	06T25277Y67	RES,RK 272J 1/16 -CP
R129	06T25278Y20	RES,RK 394J 1/16 -CP
R130	06T25277Y97	RES,RK 473J 1/16 -CP
R131	06T25279Y04	RES,RK JUMPER1/16-CP
R132	06T25279Y04	RES,RK JUMPER1/16-CP
R133	06T25277Y57	RES,RK 102J 1/16 -CP
R134	06T25277Y65	RES,RK 222J 1/16 -CP
R141	06T25277Y33	RES,RK 101J 1/16 -CP
R149	06T25277Y50	RES,RK 511J 1/16 -CP
R150	06T25278Y20	RES,RK 394J 1/16 -CP

Symbol No.	Part No.	Description
R151	06T25277Y98	RES,RK 513J 1/16 -CP
R152	06T25277Y81	RES,RK 103J 1/16 -CP
R153	06T25277Y93	RES,RK 333J 1/16 -CP
R154	06T25277Y81	RES,RK 103J 1/16 -CP
R155	06T25277Y33	RES,RK 101J 1/16 -CP
R156	06T25277Y33	RES,RK 101J 1/16 -CP
R157	06T25277Y89	RES,RK 223J 1/16 -CP
R158	06T25277Y85	RES,RK 153J 1/16 -CP
R159	06T25277Y81	RES,RK 103J 1/16 -CP
R160	06T25279Y04	RES,RK JUMPER1/16-CP
R161	06T25277Y67	RES,RK 272J 1/16 -CP
R162	06T25278Y14	RES,RK 224J 1/16 -CP
R163	06T25277Y49	RES,RK 471J 1/16 -CP
R164	06T25278Y06	RES,RK 104J 1/16 -CP
R165	06T25279Y01	RES,RK 105J 1/16 -CP
R166	06T25277Y33	RES,RK 101J 1/16 -CP
R167	06T25277Y33	RES,RK 101J 1/16 -CP
R168	06T25277Y33	RES,RK 101J 1/16 -CP
R169	06T25277Y33	RES,RK 101J 1/16 -CP
R170	06T25277Y97	RES,RK 473J 1/16 -CP
R171	06T25279Y04	RES,RK JUMPER1/16-CP
R172	06T25277Y97	RES,RK 473J 1/16 -CP
R173	06T25279Y04	RES,RK JUMPER1/16-CP
R174	06T25277Y93	RES,RK 333J 1/16 -CP
R177	06T25277Y79	RES,RK 822J 1/16 -CP
R178	06T25278Y08	RES,RK 124J 1/16 -CP
R179	06T25277Y33	RES,RK 101J 1/16 -CP
R180	06T25277Y33	RES,RK 101J 1/16 -CP
R181	06T25277Y33	RES,RK 101J 1/16 -CP
R182	06T25277Y33	RES,RK 101J 1/16 -CP
R183	06T25277Y33	RES,RK 101J 1/16 -CP
R184	06T25277Y33	RES,RK 101J 1/16 -CP
R185	06T25277Y33	RES,RK 101J 1/16 -CP
R186	06T25277Y33	RES,RK 101J 1/16 -CP
R187	06T25277Y33	RES,RK 101J 1/16 -CP
R188	06T25277Y33	RES,RK 101J 1/16 -CP
R189	06T25277Y33	RES,RK 101J 1/16 -CP
R190	06T25277Y33	RES,RK 101J 1/16 -CP
R191	06T25277Y97	RES,RK 473J 1/16 -CP
R203	06T75433W78	RES,RK 163J 1/4 -CP
R204	06T75433W78	RES,RK 163J 1/4 -CP
R205	06T75433W57	RES,RK 222J 1/4 -CP
R206	06T75433W57	RES,RK 222J 1/4 -CP
R207	06T75433W77	RES,RK 153J 1/4 -CP
R208	06T75433W77	RES,RK 153J 1/4 -CP
R209	06T75433W50	RES,RK 112J 1/4 -CP
R210	06T75433W50	RES,RK 112J 1/4 -CP
R211	06T75434W07	RES,RK 244J 1/4 -CP
R212	06T75434W07	RES,RK 244J 1/4 -CP

Symbol No.	Part No.	Description
R213	06T75433W17	RES,RK 47RJ 1/4 -CP
R214	06T75433W17	RES,RK 47RJ 1/4 -CP
R217	06T75433W68	RES,RK 622J 1/4 -CP
R218	06T75433W68	RES,RK 622J 1/4 -CP
R219	06T75434W07	RES,RK 244J 1/4 -CP
R220	06T75434W07	RES,RK 244J 1/4 -CP

Connectors

Symbol No.	Part No.	Description
CB101	09T45435W15	FFC,52207-1590 -ED
CB102	09T45435W07	FFC,52207-0790 -E9
CB801	09T45435W22	FFC,52207-2290 -EQ

Miscellaneous

Symbol No.	Part No.	Description
ANT001	01T15513W30	ASSY,ANT CABLE 7865R
CB801	09T35473Y16	WTB,F169B001-16 -DB
CFL401	65T25089Y02	CFL,CTY22P2-93N98
CH401	09T25444Y15	BTB,55323-1511 -B
CH501	01T35001Y01	ASSY,UNIZ0N CONN 52R
CH601	01T25413Y01	ASSY,CONN 2P
DIN802	01T35496Y01	ASSY,DIN 7865R0
ET330	01T35497Y02	ASSY,WIRE RCA7865R0 (R-OUT/SUB.W & FRONT OUT)
JK601	09T95460W01	JAC,HSJ0857-01-1010+
LCD401	65T35461Y01	LCD,WTD-17847H
M601	59T65085W01	MOTOR,LOAD FF-050SK (NOSE MOTOR/7V-370mA)
SW425	40T45670W13	SPL,EC11B15243 -DB (ROTARY ENCODER/MODEÅELOUD)
SW601	40T15494Y01	SW,DETCT SPVG23 -E6 (NOSE CLOSE DET)
SW602	40T15494Y02	SW,DETCT SPVG13 -E6 (NOSE OPEN DET)

DP23S070

Symbol No.	Part No.	Description
HD101	81B31011Y01	PICKUP,EP21A620
M101	01V21600Y50	ASSY,MOTOR-WORM(7V-370mA)
M102	01V21600Y53	ASSY,MOTOR SLED(7V-370mA)
M103	01V21600Y55	ASSY,MOTOR SPINDLE(2V-90mA)
SW1	40T15494Y01	SW,DETCT SPVG23 -E6 (12cm DISC DETECT(EJECT POSITION/RELOAD))
SW2	40T15494Y02	SW,DETCT SPVG13 -E6 (8/12cm DISC DETECT(INSERT/PULL OUT))
SW3	40T15494Y07	SW,DETCT SPVG21 -E6 (8cm DISC DETECT(EJECT POSITION/RELOAD))
SW4	40T15494Y01	SW,DETCT SPVG23 -E6 (DISC CHUCKING END DETECT)
SW105	40T71025F03	SW,DETCT SPPB120(LIMIT)

Cabinet Assembly Parts List

NOTE:Parts without part number are not supplied.

Symbol No.	Index	Part No.	Description
1		01V36400Y92	ASSY,NOSE UNIT 65RO
5		13C21370Y02	NOSE,BASE(CD) ASSY
6		03S44205G07	SCR,T-TITE M2.6X5
7		33C10618Y04	FACE,PLATE
9		03S38013W05	SCR,T-TITE M2.6X16
10		07D91595W01	BKT,SIDE ASSY
11		07D91595W02	BKT,SIDE(R) ASSY
12		13D21372Y01	NOSE,BASE COVER
13		03S71677F02	SCR,T-TITE-B M2.6X6
14		36A70327W01	KNOB,SLIDE
15		81D30307Y01	DP23S070,CD MECH
16		30T25456Y15	SMCD-22X112-BDX6(BL)
18		77B30901Y01	MB4R9030,FM/AM UNIT (TU001)
22		13D31424Y02	NOSE,PIECE ASSY
23		13D31239Y02	NOSE,BOTTOM
24		03S68555F20	SCR,WAVE M1.7X5
25		41A50111W10	SPRING,KNOB
26		36C31240Y02	KNOB,VOL ASSY
27		15B31237Y01	COVER,LCD
28		15C31236Y01	CASE,LCD
29		26A31238Y01	REFLECTOR,SHEET
30		75T85248W09	RUBBER,ELECTRIC
31		03S94385F77	SCR,NYLOK M1.7X3
33		26A31238Y02	REFLECTOR,SHEET(B)
34		14S30726Y22	INS,SHEET
36		15C11509Y01	CASE,DC-DC
37		15B11508Y01	COVER,DC-DC
38		14A20122Y01	INSULATOR,DC-DC
39		03S44205G29	SCR,T-TITE M2.6X6
100		01C21375Y03	ASSY,BKT F BASE
101		07B21380Y01	BKT,SLIDER
102		07B20734Y01	BKT,BASE L
103		07B20734Y02	BKT,BASE R
104		07A21381Y01	BKT,ARM(L)
105		07A21381Y02	BKT,ARM(R)
106		04B41345P54	WASHER,LOCK
107		03A20851Y02	SCR,SLIDER
108		49A22103Y01	ROLLER,SLIDER FRONT
109		44A20248Y01	GEAR,SLIDER
110		44T25192Y01	GEAR,CLUTCH ASSY
111		07C20740Y01	BKT,MOTOR
112		44A90467W02	GEAR,WORM
113		03S68259F23	SCR,P-LOCK M2X3
114		03S94385F13	SCR,NYLOK M2.6X3
115		41A22014Y01	SPRING,EXTENSION
116		03S94385F24	SCREW,NYLOK
117		14S11351Y95	INS,CVR 8X6XT0.25
118		75S21219Y48	CUS,RUB(9X4.5XT2)

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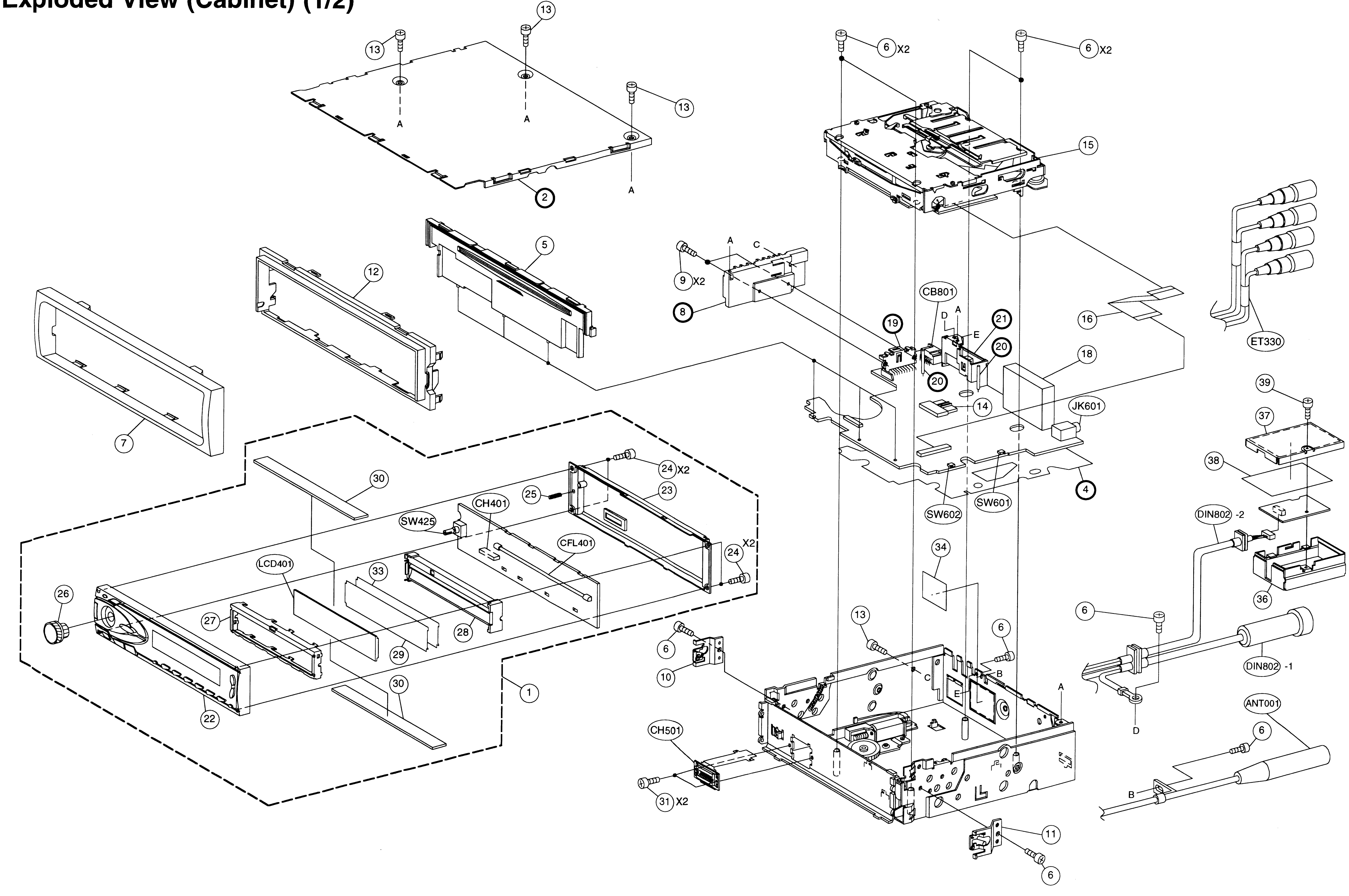
Exploded View (Cabinet) (1/2)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13
13
13
A
A
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2
6 X2
6 X2
15
5
12
7
9 X2
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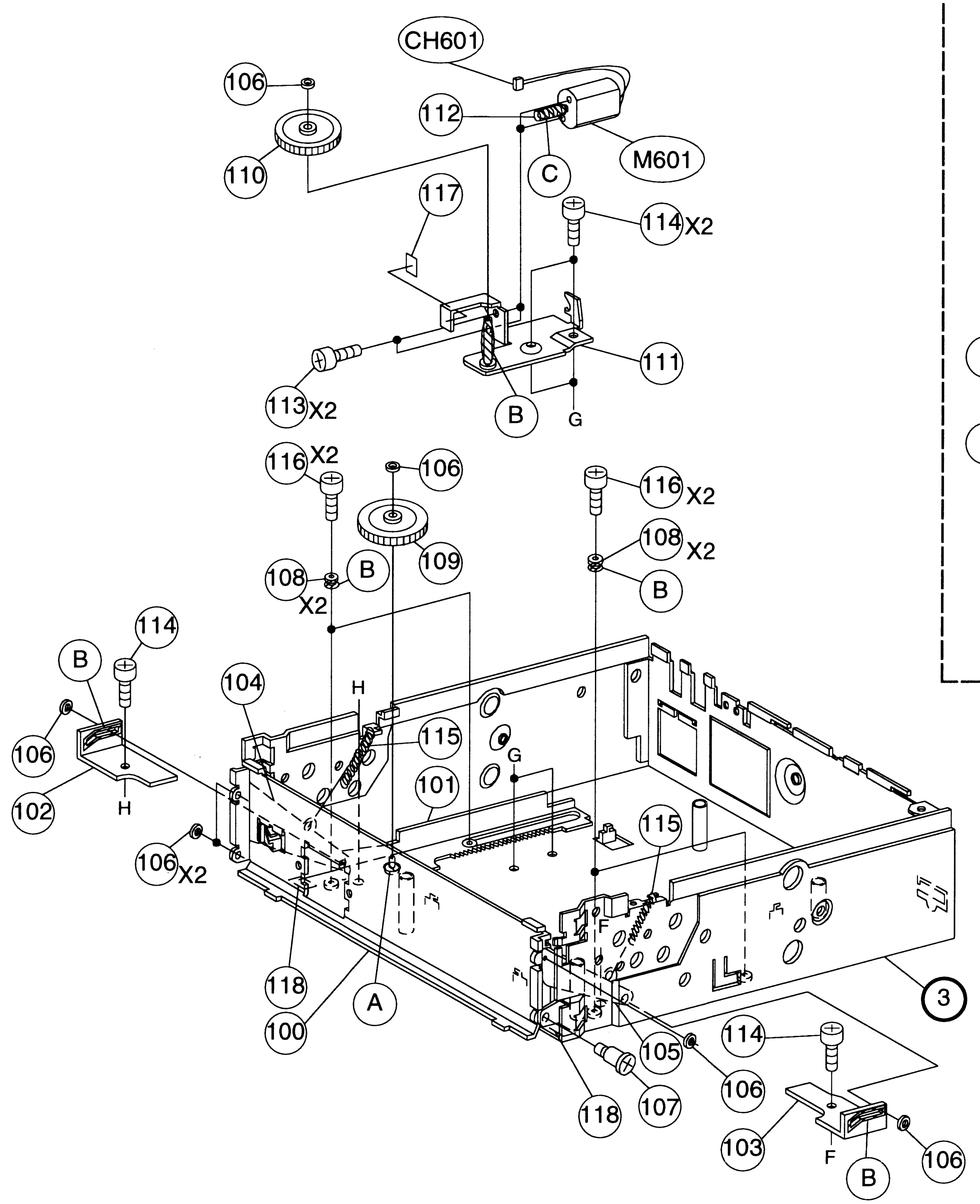
C
CB801
D
A
E
19
21
20
20
16
18
ET330
14
JK601
4
39
37
38
SW602
SW601
DIN802 -2
34
36
30
24 X2
23
25
CH401
SW425
CFL401
24 X2
LCD401
33
26
27
28
29
30
1
22
6
10
13
6
C
B
E
A
6
DIN802 -1
D
ANT001
6
B
CH501
31 X2
11
6

Exploded View (Cabinet) (2/2)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CH601
112
M601
C
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113 X2
B
G
116 X2
106
109
116 X2
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B
108 X2
B
114
B
106
102
H
104
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103
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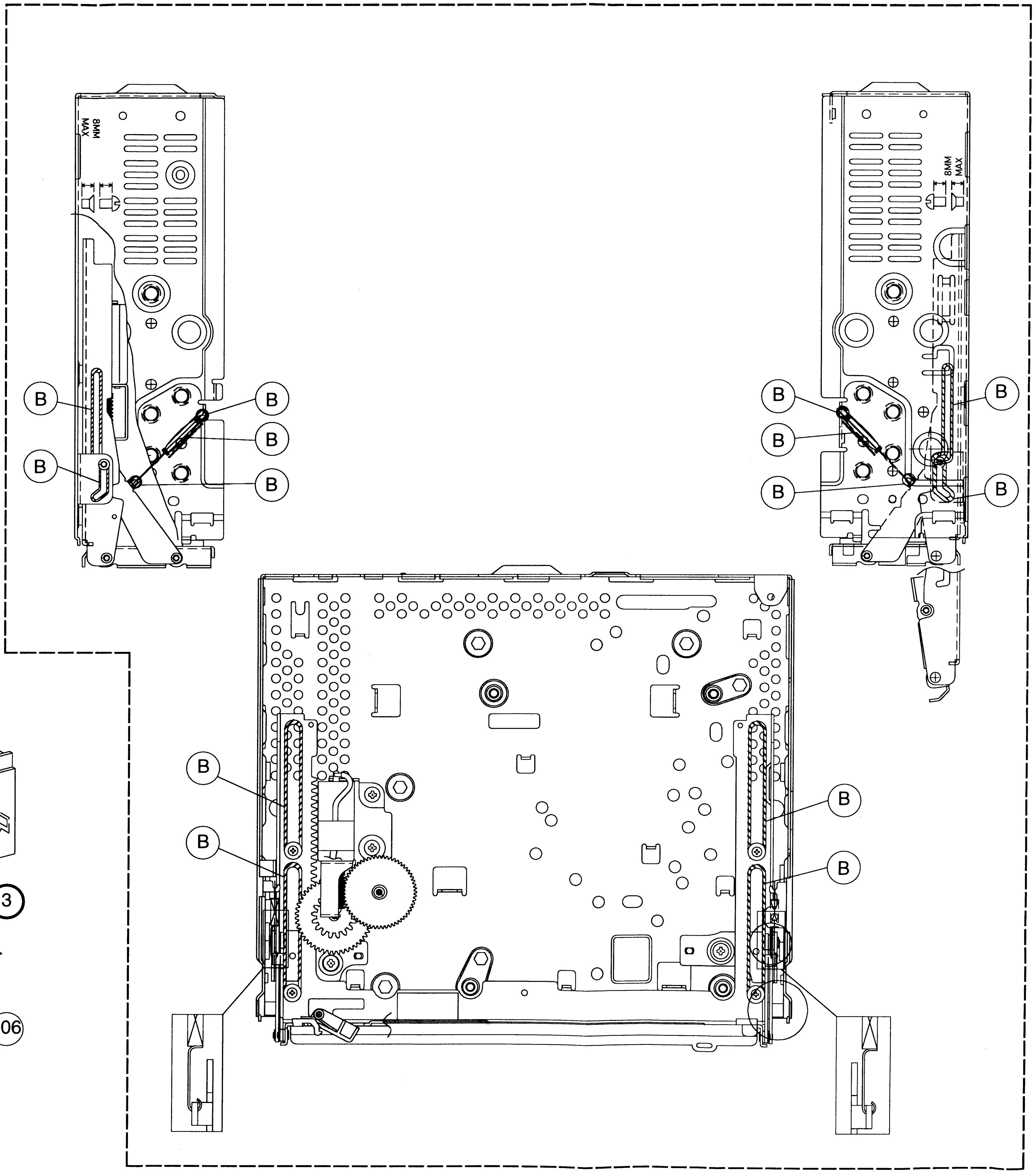
106


8MM MAX
B
B
B
B
B
8MM MAX
B
B
B
B
B
B
B
B
B

▨ ....point of GREASE applied.

Ⓐ	GREASE, FG-53C (11S20853Y01)
Ⓑ	GREASE, E PASTE (11S42419J09)
Ⓒ	GREASE SILICON (11S490487)

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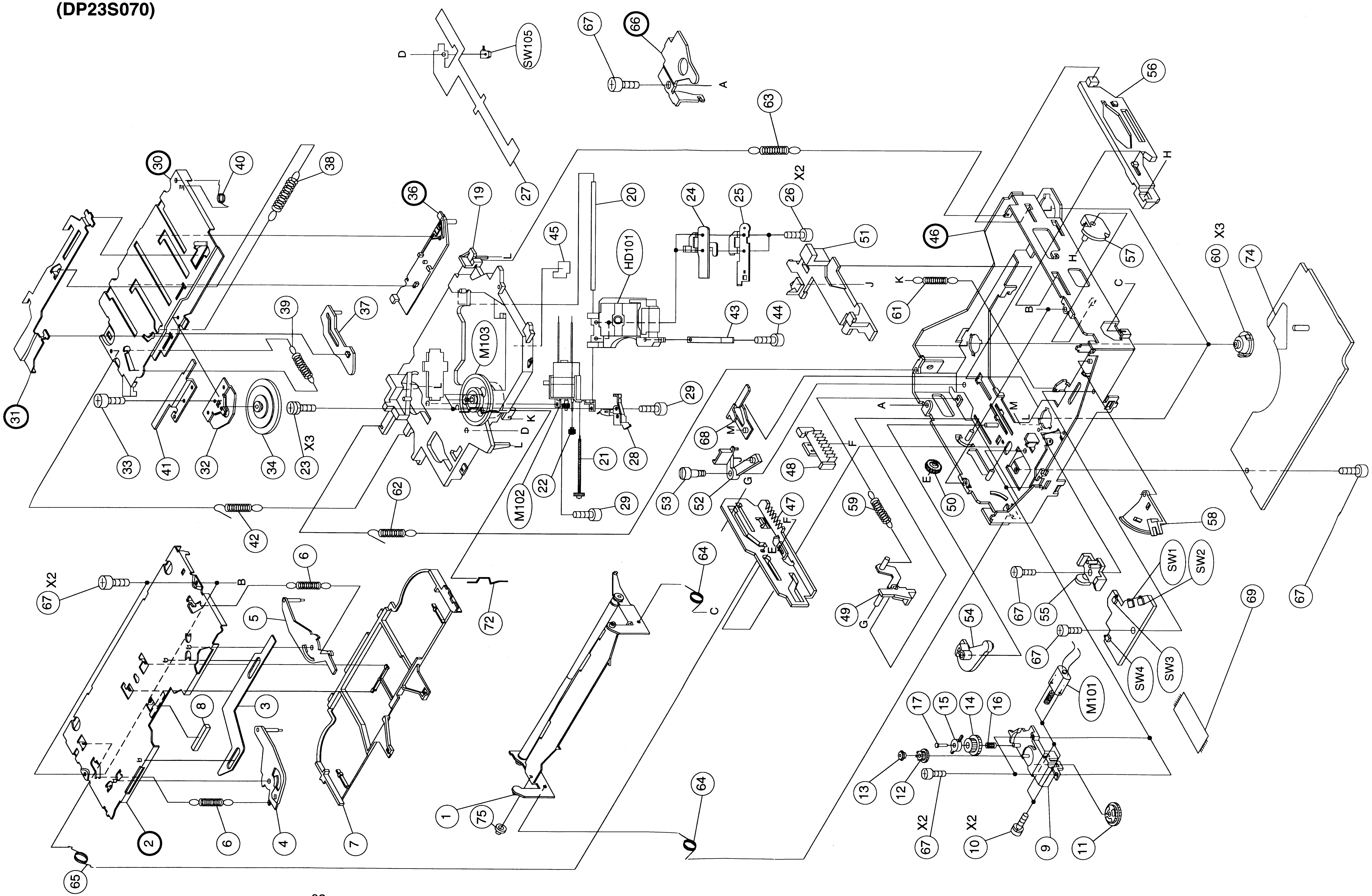
Exploded View (CD Deck Mechanism)

(DP23S070)


SW105
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27
67
66
A
63
56
H
30
40
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36
19
20
45
HD101
24
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51
J
46
57
60 X3
74
31
39
37
M103
43
44
K
61
B
C
33
41
32
34
23 X3
L
D
K
M102
22
21
28
29
68
M
48
F
A
M
L
53
52
G
47
F
E
E
50
59
58
42
62
67 X2
B
6
5
64
C
72
49
G
54
67
55
SW1
SW2
SW3
SW4
69
67
8
3
M101
17
15
14
16
13
12
1
75
64
2
6
4
7
67 X2
10 X2
9
11
65

CD Deck Mechanism Assembly Parts List

NOTE:Parts without part number are not supplied.

Symbol No.	Index	Part No.	Description
1		01V21600Y47	ASSY,ARM GUIDE
3		45B11564Y01	LEVER,LINK-TOP
4		45B11595Y01	LEVER,DISC(R)
5		45B11596Y01	LEVER,DISC(L)
6		41B11613Y02	SPRING,PULL
7		15D11588Y01	GUIDE,TOP DPS
8		75A21286Y01	CUSHION,CLAMPER DP-S
9		07C11584Y01	BKT,MOTOR LOAD
10		03S40014G07	SCR,MCH M2X4
11		44B11578Y01	GEAR,(A)
12		44B11579Y01	GEAR,(B)
13		44B11580Y01	GEAR,(C)
14		44B11582Y01	GEAR,(E)
15		15A11587Y01	HOLDER,CLUCH
16		41A11612Y01	SPRING,COMP
17		47A11571Y01	SHAFT,CLUTCH
19		27D11602Y01	CHASSIS,PICKUP
20		47A11575Y01	SHAFT,PICK
21		01V21600Y54	ASSY,SHAFT SCREW
22		44A70590W04	GEAR,MIDDLE
23		03S72235F96	SCR,MCH M1.7X3.5(SW)
24		07B11623Y01	BKT,SPRING NUT
25		41A11606Y01	SPRING,NUT
26		03S94385F18	SCR,NYLON M2X3.5
27		84T25102Y01	PANEL,FPC CONT
28		41B11566Y01	SPRING,SHAFT
29		03S70494F13	SCR,P-TITE M2X6 BLK
32		07A11565Y01	PLATE,CLAMP
33		03S94385F02	SCR,NYLOK M1.7X3
34		43A30262Y01	TABLE,CLAMPER-R
37		45A11599Y01	LEVER,ACTUATOR
38		41B11613Y03	SPRING,PULL
39		41B11613Y05	SPRING,LEV-ACT
40		41A11609Y01	SPRING,LEVER
41		41B30747Y01	SPRING,PLATE
42		41B11613Y01	SPRING,PULL
43		41A11040Y01	SPRING,SLED-HOE
44		03S72235F79	SCR,MCH M1.4X3
45		43A21240Y01	SHEET,FPC PICK
47		45B11560Y01	SLIDER,LOAD
48		44B11586Y01	RACK
49		45A11601Y01	LEVER,TRIGER
50		44B11581Y01	GEAR,(D)
51		45B11594Y01	SLIDER,LOCK(L)
52		45A11592Y01	ARM,LOCK(L2)
53		03A11574Y01	SCREW,LOCK
54		45B11591Y01	ARM,LOCK(L1)
55		07A11585Y01	BKT,MOTOR WIRE
56		45B11593Y01	SLIDER,LOCK(R)
57		45B11607Y01	ARM,LOCK(R)
58		45A11597Y01	LEVER,SW
59		41B11613Y04	SPRING,TRIGER
60		75C30466Y01	DAMPER,DPS2
61		41B11613Y06	SPRING,PULL
62		41B11613Y07	SPRING,PULL
63		41B11613Y08	SPRING,PULL
64		41A11610Y01	SPRING,ROL
65		41A31894Y01	SPRING,SLIDER
67		03A21791Y01	SCREW,M2X3.5 S-TITE
68		07B20905Y01	BKT,FPC CONT
69		30T15126W15	WIRE,PC JOINT 7P
72		41A21613Y01	SPRING,SPINDOL
74		14A30831Y01	INS,CVR
75		43A31443Y01	ROLLER,ARM DISC (C)